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IMPLEMENTATION OF THE CLEAN WATER ACT

CONCERNING

OCEAN DISCHARGE WAIVERS

(A Case Study of Lawmaking by Rulemakers)

REPORT

BY THE

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

OF THE

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION U.S. HOUSE OF REPRESENTATIVES

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1. Correspondence, (dated October, November 1981, and February, 1981) between the Subcommittee and Mr. Jorling, concerning the Los Angeles, Ca. hearing, Mr. Jorling's request to testify, and the Subcommittee's granting and scheduling of that request.
2. December 7, 1977 letter to Senator Muskie from Mr. Jorling commenting on the ocean waiver provision of the 1977 Clean Water Act bill.
3. December 20, 1977 memorandum to the EPA Administrator from Mr. Jorling, concerning the establishment of the 301(h) task force.
4. January 1978 report: "Preliminary Concepts for Regulating Modifications to Secondary Treatment Requirements for Ocean Outfalls, per Section 301(h) of the Clean Water Act," by D. J. Baumgartner, et al.
5. March 1, 1978 memorandum from the Section 301(h) Task Force to Thomas C. Jorling, Assistant Administrator, setting forth section 301(h) regulatory options and pros and cons.
6. March 31, 1978 memorandum from Thomas C. Jorling, Assistant Administrator, U.S. EPA, to the Administrator, concerning approval of proposed regulations for Section 301(h).
7. April 7, 1978 memorandum from EPA attorney Lisa Friedman to EPA General Counsel Joan Z. Bernstein, commenting on the approach to implementing the 301(h) provision.
8. April 25, 1979 memorandum from Thomas C. Jorling, Assistant Administrator, U.S. EPA, to the Administrator, concerning approval of final regulations for implementing Section 301(h).
9. May 7, 1981 U.S. Court of Appeals decision: *NRDC* v. *EPA;* ——— E2d ———; (11 ELR 20487) (D.C. Cir., 1981.)
10. U.S. EPA Transcript (pages 89–97, and 151–153 only), "Public Meeting on Modification of Secondary Treatment Requirement," February 22, 1978, San Francisco, California.
11. Section 301(h), The 1972 Federal Water Pollution Control Act, P.L. 92,500, as amended by the 1977 Clean Water Act.

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C., December 7, 1982.

Hon. JAMES J. HOWARD,
Chairman, Committee on Public Works and Transportation, Washington, D.C.

DEAR MR. CHAIRMAN: During the past several years, Congress has increasingly delegated the responsibility for establishing regulatory standards and rules to Executive Branch agencies and departments. This has been especially true with respect to enactment of the several air, water and toxic chemical pollution abatement statutes now in force, which contain many scientifically complex and highly technical issues which the Congress is ill equipped to resolve.

The development of these rules and regulations necessarily requires agency officials to interpret laws and their legislative histories, and, with respect to scientific or technical issues, to make judgments as to the weight or value to be given to one factor or another. Yet, these sources are often ambiguous, leaving the rulemaker to rely on his or her own values and attitudes about how to proceed. As a result, the delegation of "rulemaking" authority all too often becomes a delegation of "lawmaking" responsibility as well.

In the Subcommittee's efforts to monitor and assess the U.S. Environmental Protection Agency's efforts to carry out the Clean Water Act's provisions over the past 10 years, it has frequently encountered many instances wherein agency rulemakers have had to interpret the law and its intent, and in effect, become lawmakers. This report, which has been approved by the Subcommittee for publication, is a case study of what can happen when this occurs, and how the results of actions and decisions by government officials can often be seemingly at odds with what is perceived to be the intent of a statute.

In September 1981, the Subcommittee held hearings in Los Angeles, California, to review the U.S. Environmental Protection Agency's efforts to carry out the 1977 amendment to the law, authorizing waivers from the law's full secondary treatment cleanup requirement to communities discharging to the ocean. Of particular concern to the Subcommittee was why, after almost four years, none of the applications for the waiver had been acted on.

Evidence presented to the Subcommittee at that time, and that developed subsequently through further field investigation and a hearing in February of this year, disclosed that EPA officials had implemented the waiver amendment in a manner that either precluded or intimidated many communities from even applying for the legislative relief intended by Congress. As a result, many communities faced the prospect of having to needlessly spend billions

of dollars for additional levels of wastewater cleanup, dollars that could otherwise be available to other communities with more serious water quality problems.

Legislation enacted late last year should resolve many of the problems uncovered by the Subcommittee's investigation of this particular provision of the clean water law. Nonetheless, the events that took place between 1977 and 1981, including the very statements and actions by numerous EPA officials, are highly instructive as to the true nature of the lawmaking-through-rulemaking problem.

While individual members of the Subcommittee do not necessarily concur with each and every observation and conclusion in the report, the Subcommittee does believe that overall the report can provide important guidance to the Committee on Public Works and Transportation, to the Congress, and to all students of government.

With best wishes, I am,

Very truly yours,

ELLIOTT H. LEVITAS,

Chairman, Subcommittee on Investigations and Oversight.

EXECUTIVE SUMMARY

In enacting numerous regulatory statutes over the past several years, Congress has frequently delegated to the Executive Branch the task of resolving what are often scientifically complex and controversial issues, particularly those pertaining to the setting of public health and environmental protection standards. This approach, however, is not without its drawbacks.

Frequently, the rulemaking process simply becomes another opportunity for regulators to further alter the final results of the legislative process, particularly when the results of that process are not consonant with the preferences or philosophies of the regulator. In such instances, regulators are often able to take advantage of legislative ambiguities and uncertainties or disagreements among those in the technical community to influence both the standard setting process and the standards, to achieve their own goals. In effect, the rulemakers become the lawmakers!

This report, which stems from the subcommittee's oversight of the U.S. Environmental Protection Agency's (EPA) efforts to carry out certain of its Congressional mandates, is a case study of just such a situation, and should be of interest not only to Members of Congress and government officials, but to all students of government.

On September 8, 1981, the Subcommittee on Investigations and Oversight of the House Committee on Public Works and Transportation held a hearing in Los Angeles, California. The primary focus of that hearing was the implementation of a 1977 amendment to the 1972 Federal Water Pollution Control Act which authorized the U.S. Environmental Protection Agency (EPA) to grant waivers from the law's general requirement that municipalities provide a minimum of secondary treatment (a level of treatment capable of removing 85 percent of most common pollutants) of waste discharges to marine, or ocean waters.

Of particular interest to the subcomittee on September 8, 1981, was why no application for this "ocean waiver" had been acted upon by the EPA since the clean water law had been amended in 1977.

During that hearing, the Subcommittee was confronted with evidence that suggested certain EPA officials, including former EPA Assistant Administrator, Mr. Thomas C. Jorling, did not like the 1977 marine waiver amendment, and that they set out to limit, if not block its effective application, including attempts to tighten administrative regulations by adopting restrictive or exlusionary requirements, some of which went beyond that called for in the law.

The 1977 ocean discharge waiver provision was controversial from the outset, due primarily to the fact that it represented the first breach in the new national approach to water pollution abatement adopted in 1972: the basing of cleanup requirements on the

performance capability of treatment technologies. While communities discharging to fresh waters would still be required to meet the statute's minimum, "technology based", secondary teatment requirement, qualified coastal communities would now have an opportunity to temper this mandate, based on assessment of the ocean's "assimilative capacity", that is, the extent to which it could absorb pollution without harm.

There were two basic reasons underlying Congress' willingness to make this limited exception: First, Congress recognized that the physical and chemical characteristics of the marine environment were significantly different from those of inland fresh waters and that full secondary treatment was not necessary in all cases to achieve national water quality goals.

Second, Congress wanted to avoid treatment for treatment's sake, particularly given the multi-million dollar cost of the additional margin of wastewater treatment capability that would otherwise be required by many coastal communities. For those able to comply with the law's several strict prerequisites to a waiver, this expense could be avoided.

Subsequent investigation by the Subcommittee, and an additional day of hearings, on February 18, 1982, disclosed that the attitude of those EPA officials involved was one of at least reluctant acceptance of this amendment to the law, if not outright defiance. The record clearly shows that the regulations that the EPA proposed, and the regulations as finally adopted, along with other statements and actions of agency officials had the effect of preventing communities from obtaining waivers from the law's full municipal secondary treatment requirement. In fact, so strict were the Agency's waiver application requirements that even the law's minimum right to simply apply for a waiver was denied to many communities.

The answers to the questions of how and why this happened can be seen in the collective set of attitudes, actions, and statements and written records of those EPA officials involved. Key, was the ability of the EPA rulemakers to transform their negative attitudes about the waiver amendment into both procedural and substantive constraints to its application, convincing many communites that they would incur great expense in preparing an application with scant prospects of having it approved. And underlying all of these actions was a functional, if not formal policy adhered to by the agency rulemakers: to avoid regulatory concessions that "might weaken our no-retreat-from-secondary position."

The subcommittee's oversight of the EPA's implementation of the 1977 ocean discharge waiver provision was not intended to review the "environmental" merits of that amendment. Rather, it was initially concerned with why there had been so much delay in carrying out that amendment, and, later, with the role and influence, respectively, that administrative agencies and their officials play in shaping or altering the intent and ultimate results of laws enacted by Congress.

The record of what has transpired under the ocean discharge waiver provision of the Clean Water Act underscores the need for Congress to maintain close oversight of Executive departments and agencies. And to the extent that Congress continues to delegate

rulemaking authority to the Executive, it must also be cognizant of the actions and comments of the rulemakers themselves as they go about the tasks necessary to implement regulatory statutes. But close oversight, by itself, is not enough.

On the one hand, the ambiguous provisions of laws and legislative histories that give rulemakers so much latitude are creatures of the Congress, not the Executive. Further, the delegation, or perhaps more appropriately, the deferral of key or senstive decisions and details to the Executive and its rulemaking process for whatever reasons, are also acts of the Congress, not the Executive.

On the other hand, it is the Executive, in the person of its administrators, or rulemakers, that choose a course and direction, and take from the laws and legislative histories that which they deem appropriate to fulfill their administrative responsibilities.

To the extent that Congress continues to delegate rulemaking responsibilites to the Executive, it must strive to correct its own shortcomings through more careful and precise construction of laws and their legislative histories. Greater efforts must also be made to hold Executive agency officials accountable for their decisions and actions. This, in turn, will require Congress to enhance not only its oversight efforts, but its tools for conducting that oversight. In no other way can these rulemakers be held truly accountable to the public.

FOREWORD

Over the past ten to fifteen years, Congress has enacted a number of statutes intended to improve the health and well-being of the general public, and to enhance and protect the quality of the nation's natural resources; its air, water and wildlife. In doing so, however, it has frequently come face-to-face with a number of highly technical, and scientifically sophisticated issues which are beyond its institutional capabilities to resolve, issues such as determining what degree of exposure to a harmful toxin is acceptable or safe, or if there is a safe level at all.

Lacking the ability to answer such questions, Congress, when enacting laws such as the Clean Water Act, or the Toxic Substances Control Act, has gone as far as establishing national goals, policies, and deadlines, and in some cases the necessary regulatory mechanisms and sanctions for achieving these statutory objectives. The setting of the actual clean up or control standards, however has frequently been left to the Executive Branch and its collective departments and agencies. This approach has not been without its share of problems and disppointments.

Faced with strict statutory deadlines for carrying out a provision of law, regulatory agency officials have often been left with insufficient time to collect critical data, obtain public comments, conduct the necessary analyses, and issue the required rules and regulations. Further, there has frequently been little agreement or consensus among those in the scientific community as to what is the "right" answer to many of these highly technical issues, such as what constitutes an ample "margin of safety," or what amount of a given chemical substance is a "toxic" amount? Nor do the various laws and their legislative histories necessarily alleviate these problems.

Rarely does a statute dealing with such highly controversial and often emotional issues such as freeing our environment from life threatening toxins and other pollutants contain clear and concise interpretations of what is to be achieved. Often, the laws are too vague in their language to be of much help, and their accompanying legislative histories, the result of changes and compromises wrought by the legislative process itself, are either silent or ambiguous on such matters.

When this occurs, the regulator is left with the burden of making decisions or value judgments that are inherently "policy making" or "political" in nature. In essence, the rulemaker becomes the lawmaker!

Of particular concern to the Congress in these situations are the additional opportunities that exist for interested parties to influence the results of the rulemaking, and hence, the substance of the law. As noted by the subcommittee's main witness at a February 18, 1982 hearing described below, in these situations: "The imple-

mentation of law can be avoided or applied to the benefit of one or another interested party that may have 'lost' in the Congress."

Of even greater concern is the instance where the interested party that "lost" is the very regulator that is charged with the responsibility for overseeing the rulemaking and carrying out the law. For in these instances, the rulemaker can avail himself or herself of the considerable latitudes these legislative ambiguities and technical uncertainties afford, and notwithstanding the law, can influence either or both the nature of the rules and the rulemaking process itself to reflect his or her attitudes, his or her goals and his or her personal objectives.

The following report has been prepared as a case study of just such an instance. While the report discusses the actions and decisions made by certain U.S. Environmental Protection Agency officials, and certain provisions of the Federal Clean Water Act, it is not these, per se, with which this report is primarily concerned. It is, rather, the role and influence, respectively, that administrative agencies and their executives play in shaping or altering the intent and ultimate results of laws enacted by Congress.

I. Introduction

On September 8, 1981, the Subcommittee on Investigations and Oversight of the House Committee on Public Works and Transportation held a hearing in Los Angeles, California. The primary focus of that hearing was the implementation of a 1977 amendment to the Federal Water Pollution Control Act which authorized the United States Environmental Protection Agency (EPA) to grant waivers from the law's general requirement that municipalities provide a minimum of secondary treatment [1] of waste discharges to marine or ocean waters.

Of particular interest to the subcommittee on September 8, 1981, was why no application for such a waiver had been acted upon by the EPA since the clean water law had been amended in 1977.

During the hearing, questions were raised and comments were made concerning the Environmental Protection Agency's performance in carrying out this particular provision of the law, and in particular the role of Mr. Thomas C. Jorling, in drafting the regulations governing the execution of this 1977 waiver provision. Mr. Jorling, considered by many to be an able and dedicated manager, was the EPA Assistant Administrator for Water and Hazardous Materials from 1977 to September 1979, and had been personally involved in the legislative activity leading to the 1977 amendments. He had also served on the staff of the Senate Public Works Committee when that Committee was involved with the original 1972 clean water legislation, which the 1977 Act amended.

Based on evidence before the subcommittee on September 8, 1981, some subcommittee members were left with the feeling that Mr. Jorling and other EPA officials set out to manipulate the implementation of this "marine waiver" provision of the law, now embodied in section 301(h) of the statute, so as to alter its effect. Further, the record also suggested to the subcommittee that Mr. Jorling, and possibly others in EPA, did not like the ocean discharge waiver provision as it was drafted and subsequently adopted, and that an attempt was made to limit if not block its effective application, including attempts to tighten administrative regulations by adopting restrictive or exclusionary requirements, some of which went beyond that called for in the law.

Because of statements about Mr. Jorling's role made by Members at the September hearing, the Subcommittee felt that fairness required affording Mr. Jorling an opportunity to comment on the issues raised at that session, and to have an opportunity to refute any contentions as to his purpose or intent. Indeed, Mr. Jorling's

[1] The 1972 Federal Water Pollution Control Act required that all municipal wastewater discharges receive a minimum of secondary treatment by July 1, 1977. Secondary treatment was subsequently defined by the U.S. EPA as that level of treatment capable of removing a minimum of 85 percent of the pollutants in domestic sewage.

past record of activity indicated that he was highly dedicated to enhancing and protecting the environment, and ardently supported the cleanup goals and objectives set out in many of the pollution abatement statutes enacted by the Congress. Further, he is also credited as having helped shape some of the nation's environmental regulatory laws, which were enacted during his 1969 to 1972 tenure as Counsel to the Senate Committee on Public Works.

Accordingly, Mr. Jorling was provided with a copy of the germain portion of the proceedings of the September 8, 1981 field hearing, and several related documents. His response was to "request an opportunity to be heard, under oath, on these issues and not merely respond in writing for the record." On February 18, 1982, the subcommittee held an additional day of hearings on this subject, to afford Mr. Jorling that opportunity.

It was not the purpose of the February 18, 1982 hearing, nor for that matter the September 8, 1981 hearing, to re-evaluate or debate the merits of the law's ocean waiver provision or the specific regulatory requirements of the 1977 section 301(h) amendment. Nor was it the subcommittee's intent to judge the appropriateness of the granting of any waiver to any applicant community by the EPA, or the integrity of its officials. Rather, the purpose of the subcommittee's review was to examine whether (1) the regulations that the EPA proposed, (2) the regulations as finally adopted, and (3) other statements and actions of those responsible for carrying out Section 301(h) of the law were calculated to prevent communities from obtaining waivers from the law's full municipal secondary treatment requirement, as contemplated by the 1977 amendment.

As will be seen in the following sections of this report, the attitude of those involved was one of at least reluctant acceptance, if not outright resistance to this amendment. Further, their attitude did ultimately translate into a series of actions, public statements and regulations that were perceived by the regulated community, and in certain instances by the federal court as well, as overly restrictive and contrary to Congressional intent. In fact, so strict were the Agency's requirements that even the law's minimum right to simply apply for a waiver was denied to many communities.

II. Background

The Federal Clean Water Law.

Ten years ago, the Congress, in response to growing public anxiety over the deteriorating state of the nation's water resources, launched a massive new federal regulatory effort. The Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, called for the reduction and even elimination of the flow of pollutants from municipal sewage systems and industrial plants. The Act embodied a comprehensive set of strategies intended to work in concert to achieve a national goal of "fishable-swimmable" waters by July 1, 1983. Included were stringent "point source" treatment requirements for municipalities and industry, the former receiving billions of dollars in Federal assistance to construct wastewater treatment facilities.

The 1972 law provided a new national approach to pollution abatement. Probably the most fundamental, and controversial change was the basing of treatment requirements on the performance capability of technology rather than relying on professional judgments of the "assimilative capacity" of a stream, that is how much pollution it could absorb without harm.

For municipalities, whether situated on the banks of an inland lake or stream, along the shore of a marine bay, or near the coastline of the open ocean, this meant they were to provide full "secondary" treatment of sewage discharges, a level of treatment capable of removing a minimum of 85 percent of most pollutants. A more stringent "Best Practicable Waste Treatment Technology" (BPWTT) capable of removing additional pollutants, was required by July 1, 1983.

One rationale for the change to this new "technology-based" approach was the argument that it would create national, uniform, minimum treatment requirements, and hence, national, uniform, minimum treatment costs, thereby eliminating any economic disparities among different areas of the country. The possibility that this type of approach could require more treatment than might be necessary in some situations was rejected on the belief that past "water quality based" approaches that attempted to take this concern into account frequently led to unacceptable delays and insufficient progress in abating many of the water pollution problems around the country.

The 1977 Amendments.

Five years later, in 1977, it was recognized by the Congress that far less progress had been made under the 1972 Act than had originally been contemplated. In an effort to improve upon the 1972 statute, particularly with respect to expediting the implementation of the municipal cleanup program, the Congress enacted further modifications to the law. Among these was one that recognized for the first time that full secondary treatment by municipalities was not justified in all cases.

A particular provision of the 1977 amendments, now section 301(h) of the law, therefore authorized the Administrator of EPA to grant waivers allowing lesser levels of treatment to coastal communities discharging their wastes through outfalls into marine or ocean waters, provided certain environmental safeguards were assured. The ocean discharge waiver, as it is frequently referred to, had as one of its underlying purposes the avoidance of treatment for treatment's sake, particularly given the multi-million dollar cost of the additional margin of wastewater treatment capability that would otherwise be required at many municipal facilities.

Technically, Congress' willingness to make a limited distinction between the cleanup requirements that would be required of those discharging to fresh, or inland waters, and those communities that discharged to marine waters,[2] was predicated on the fact that the

[2] The 1977 act specifically defined "the discharge of any pollutant into marine waters" as ". . . a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement . . ."

marine environment offers rapid and massive dilution, that dissolved oxygen depletion (which must be avoided to maintain a healthy aquatic community), is less of a problem in marine than fresh water, and that the turbulence or flushing action of the ocean results in rapid dispersal of pollutants.

The statutory wording of the amendment was strict, authorizing EPA to grant five-year waivers from full secondary treatment on a case-by-case basis to communities with existing ocean outfalls on the date of enactment of the 1977 amendments. Applicants were to assure a water quality necessary for the "protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife." Other provisions required that there be water quality standards applicable to the waters affected, a system of monitoring to assess the effects, a pretreatment program for industrial facilities contributing wastes to the treatment works, and a schedule to prevent toxic pollutants from non-industrial sources from entering treatment works. Further, no waiver was to be granted an applicant if the resulting discharge made it necessary to impose stricter cleanup requirements on any other source of discharge or if large quantities of pollutants for which the waiver is granted were contemplated. The 1977 amendment also established a tight—270 days—timetable for submission of applications.[3]

Collectively, these requirements were strict. Indeed, it was not the intent of Congress to create a loophole that would enable coastal communities to avoid the law's cleanup requirements. Rather, it was an attempt to afford some relief for those legitimate situations where good, sound, technical judgement and the best available information would indicate that the water quality benefits from full secondary treatment were not technically justified.

Implementing Section 301(h).

Initially, EPA moved rapidly to carry out the section 301(h) provision, issuing proposed regulations on April 25, 1978. However, from that point on, problems in resolving some of the more complex technical and scientific issues that the language of this amendment posed, such as what standards would provide "protection of a balanced, indigenous population of shellfish, fish, and wildlife" in the affected area, or what constituted "deep" waters of the territorial sea, began to delay the process. Final regulations were not issued until more than a year later, on June 15, 1979, and these were almost immediately challenged in court by various groups dissatisfied with the EPA's approach to implementing the amendment.

When the subcommittee held its oversight hearing in Los Angeles, California on September 8, 1981, almost four years after the law had been amended, it found that only 227 coastal communities had filed preliminary applications, and that only 70 of these had taken the further step of submitting final applications. Yet, as of the day of the hearing, none of these had been acted on by the EPA.

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[3] This particular restriction was further amended by Public Law 97-117, in December, 1981, reopening the waiver application period for one year.

The array of evidence before the subcommittee indicated that this lack of progress appeared to be due to efforts on the part of the EPA to actually discourage communities from applying for the waiver, and to limit the application of this statutory provision to as few communities as possible. Among the evidence: a report and testimony by the U.S. General Accounting Office on the EPA's efforts to implement the section 301(h) provision;[4] a May 7 ruling by the U.S. Court of Appeals for the District of Columbia;[5] and various statements and correspondence of various EPA officials, most notably, Mr. Thomas C. Jorling.

Essentially, it appeared that EPA had taken an already tightly-drawn statute and established both procedural and substantive barriers beyond those in the law, thus presenting formidable obstacles to communities seeking to obtain ocean waivers. Procedurally, the agency had demanded a vast amount of data in support of an application, leading some of those involved to question the amount and appropriateness of the information. Additionally, EPA had effectively proclaimed an exclusionary policy which convinced many communities that they would incur great expense in preparing an application with scant prospects of having it approved.

Substantively, the agency had arbitrarily added eligibility requirements beyond those in the statute, ruling out certain facilities such as those that already met the law's secondary treatment requirement, and those that sought to provide less than even primary treatment, a level of treatment that removes about 30 to 35 percent of most pollutants. Additionally, the agency, in the development of its proposed regulations, set out restrictions that were even more stringent. While these were later modified in response to public comment, and they never become final, they are indicative of what appeared to be the agency's reluctance to embrace this statutory provision.

The answers to the questions of how and why this happened can be seen in the collective set of attitudes, actions, statements and written records of those EPA officials involved, particularly those of Mr. Jorling and the members of his EPA section 301(h) rulemaking task force, both prior and subsequent to the enactment of this particular amendment. As will be seen in the following sections of this report, these individuals were well able to transform their negative attitudes about the amendment into very substantive constraints to its application.

III. The Attitude

Rigorous Controls, Strict Interpretation

From the outset, EPA evidenced no notable enthusiasm for the ocean discharge waiver provision. On September 16, 1977, shortly after the waiver provision had appeared in a Senate bill, and several months prior to Congress' adoption of the measure, Mr. Jorling and other EPA officials appeared before the House Public Works and Transportation's Water Resources Subcommittee to discuss

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[4] Report To The Congress of the United States by the Comptroller General, U.S. General Accounting Office, May 22, 1981, CED-81-68.

[5] *NRDC* v. *EPA*, ——— F.2d, ———. (11 # ELR 20487) (D.C. Cir., 1981).

pending amendments to the 1972 clean water law. During that hearing, in response to a House Member's question as to whether the Senate ocean discharge waiver provision was "so tight that probably no discharge would qualify for the waiver," and that changes might be needed, Mr. Jorling commented quite to the contrary:

> We think, however, *it is much too loosely written,* and potentially qualifies areas of the marine environment which should not receive the relief that is desired . . . with some modification, we can support the Senate amendment, but *we believe it has to be tightened,* especially in the area of the definition of deepwater marine waters, so that only deepwater marine waters qualify . . . But we want to make sure that it is confined to the area of difficulty and not used as an escape valve for legitimate pollution cleanup needs. (Emphasis added.)

In commenting on his 1977 statement at the February 18, 1982 Subcommittee hearing, Mr. Jorling claimed:

> It was not a concern that, as I understand the legislative history, in any way attempted to deprive those communities that were clearly within those that were the subject of the provision itself, namely the Southern California communities that had studied the problem of marine outfall, Seattle in Puget Sound, to a lesser extent Anchorage and the facilities in Hawaii. Our concern was that it not be broadened to include the countless other publicly-owned treatment systems and cause them or give them another opportunity to delay compliance [with the law].

Yet, later, on December 6, 1977, when the House and Senate conferees finished their work on the bill containing this amendment and filed their legislative reports with their respective chambers, the language of the ocean discharge waiver provision remained unchanged.

As if dissatisfied with the outcome, Mr. Jorling, in a December 7, 1977, letter to the House-Senate Conference Chairman, then Senator Edmund Muskie, noted that he was "taking the liberty of addressing one of the major amendments of the bills before Congress—that covering requirements for municipal outfalls which discharge into deep marine waters—and stating EPA's interpretation of that proposal."

While previously claiming that the statutory wording was "too loosely written," Mr. Jorling in this seemingly last minute letter, now advised that the provision was seen by the EPA as narrow in the extreme, limiting the granting of waivers to "very special circumstances." In closing the two and one half page, highly detailed letter, Mr. Jorling went on to note:

> Prudence dictates that *we apply controls as rigorously as possible* in order to protect the oceans. Therefore, any modifications of pollution controls applicable to the oceans occasioned by short term needs should and, *as we interpret*

> *the conference report* is quite limited in scope. (Emphasis added.) [6]

When he appeared before the Subcommittee on February 18, 1982, Mr. Jorling attempted to explain his intent in writing the December 7, 1977 letter. His comments, however, would appear to further confirm that he still perceived the language of the amendment to be too broad:

> I looked upon that letter as an effort to force the Congress, especially the Conferees to bite more bullets in giving intention and direction to the provision at the time of adoption of the Conference Report than was included in the Conference Report itself.

Indeed, the Conferees, in reporting the results of their efforts to resolve differences in the legislation, shed little additional light on the interpretation to be given this amendment, as they had elected to utilize the Senate's original bill report language to describe the intent of the provision. But the adequacy of Mr. Jorling's more recent explanation of the purpose of this December 7, 1977 letter remains suspect in that it was written long before the Conferees filed their final report. In fact, the final version of the December 7, 1977 letter was actually drafted by November 17, 1977. Yet it was not provided to the House-Senate Conference Chairman until twenty days later, the day after the Conferees had concluded their work.

It is not unusual for Executive Branch officials to make their disposition about a bill known to Members of the Congress. In fact, such views are often requested when absent. But it is of considerable question in this instance, given the stated purpose of this letter, as to why Mr. Jorling waited to write a letter with his interpretation of the legislation until after the conferees had concluded their efforts.

As the letter itself indicates, Mr. Jorling considered the ocean waiver issue to be one of the major provisions included in the pending bill. Why then, was the letter not furnished to the Conferees while they were still meeting and debating the merits of the overall bill? Why was such a formal statement of the EPA's position on this issue left to be inserted into the Senate record, by one Member, and apparently without any opportunity for debate or discussion among all of the Conferees or other Members of the Senate? Could it have been that if the Conferees, as a group, had been forced to formally confront Mr. Jorling's views and interpretation of this amendment, and how it was to be carried out, that they would have had to act, formally, to reject them?

The answer to these questions, perhaps can be found in a dialogue between Congressman Stangeland and Mr. Jorling, during the February 18, 1982 hearing. Commented Mr. Stangeland:

> You testified before a House committee on September 15, 1977, saying that the [marine waiver] provision was loosely drawn, in need of tightening up regarding provid-

[6] The conference report referenced here is the Conference Report on H.R. 3199. The Clean Water Act of 1977.

ing relief from secondary treatment requirements to areas that should not be given such relief.

Then on December 7, just before floor action on the conference report, you said you interpreted the provision to be narrowly drawn. Nothing had changed, though, same language, no legislative history had changed. The Senate report [language] stood, the Senate floor debate was unchanged.

Now you said in a letter to Senator Muskie that: "Prudence dictates that we apply controls as rigorously as possible to protect the oceans. Therefore any modification of the pollution controls applicable to the ocean occasioned by short-term needs should be, and as we interpret the conference agreement, is quite limited in scope."

I am wondering how 301(h) became transformed between September 15 of 1977 to December 1977 from loosely written, environmentally weak, to a narrowly-drawn limited provision?

To which Mr. Jorling responded:

I think it comes from the view that I took of the language and that was the view I was concerned others would take, not those very closely associated with the conference and the activity preceding the conference; namely, those communities around the coast lines of the United States that would love to look at this provision and at least delay their compliance with construction [of wastewater treatment facilities].

When they read "marine discharges," they would interpret it loosely, and that they would then in effect say, we can qualify. So that when I would express that concern to staff on both sides and members [of Congress] on both sides, I would say is New York included? And they would say, "Certainly not. It was not included." They would say: "That is not the intention of this provision. The intention is to cover California, Seattle, Honolulu, Anchorage."

So every time I raised these concerns with members [of Congress] and staff, they would say it does not include those. That is what I was trying to get said in the official documents of the legislative process. I was not successful.

So I attempted to do it by saying okay, here is what we have said in our own conversations, and that letter of December 7, will you try again?

In effect, it would appear that Mr. Jorling's concerns were twofold: one, to ensure that the Congress, EPA staff, state and local officials, and everyone else would interpret the meaning of section 301(h) in the same narrow, restrictive way that EPA policy makers, or more specifically, the way that Mr. Jorling was interpreting the provision; and, two, to more formally document his interpretation, something that the Conferees were apparently not inclined to do. In fact, it was highly unlikely that the Conferees, as a group, would have taken such an action. Noted Jorling at the February 18, 1982 hearing:

> With respect to 301(h), it is clear that the agreement masked a great deal of disagreement, and the disagreement I would characterize as being sufficient that unless that masking occurred, there would have been no conference agreement on the entire bill. There was a very tense underlying feeling between Members of the House and Members of the Senate.

And as to the basis for his interpretation of the waiver provision he advised:

> "That provision was included in the Senate bill *with a great deal of rhetoric that it was to be a very strictly interpreted provision,* and many members of the Senate at that time and later insisted on the strictness as we began to implement that provision. (Emphasis added).

Not fully satisfied with this explanation, the Subcommittee later asked Mr. Jorling to provide a reference to "where that debate took place, the rhetoric of strictly interpreting 301(h) . . .". At that point, Mr. Jorling acknowledged that: "A great deal of that was held in conversation with Members of the House and Members of the Senate and their staff," and that "There would be no paper trail, as it were." [7] Added Mr. Jorling: "Members of the Senate committee differed, just as there were differences of opinion with the House committee."

Shortly after the 1977 Clean Water Act Amendments were enacted, the EPA initiated those activities necessary to carry out the numerous provisions contained in that bill. At that time, Mr. Jorling undertook an effort that he himself, as well as others, considered a highly unusual action for a politically appointed Assistant Administrator functioning in a policy and management level not usually involved in the day-to-day efforts of drafting regulations. Mr. Jorling personally headed the internal EPA rulemaking staff task force that would develop the regulations and guidance for the ocean discharge waiver provision, now section 301(h) of the law.

Among the reasons for doing so cited by Mr. Jorling were the necessity to assure that the short statutory time frame for carrying out this amendment was met, and because ". . . there were very serious implications . . . There were, depending on how the numbers were calculated, at least a billion dollars riding on those decisions." However, the most telling comment, at least with respect to his attitute on this matter, was his own perception of his role:

> I felt I had a responsbility to . . . the members of this [House] committee and to the members of the Senate committee who had high expectations for this program . . . . My duties of implementing the Clean Water Act called for me to take a very personal and active interest in it.

As to just how personal and active his interest was in this matter was reflected in the fact that Mr. Jorling, in addition to heading up

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[7] Indeed, it would appear that this was so, for following the hearing, and at the Subcommittee's request, Mr. Jorling submitted further information in an attempt to document the "paper trail." Interestingly, the documents he submitted, a Senate press release and excerpts from the Senate Congressional Record, were dated May, 1978, six months after the law had been amended.

the task force that was developing the regulations to carry out section 301(h), served as the hearing officer at the public sessions held by the Agency as part of the formal rulemaking process, a position which afforded him opportunities to personally challenge any comments a witness might make that did not conform to his or his staff's way of thinking.

Such occasions also provided opportunities for others to observe Assistant Administrator Jorling's attitude toward the waiver provision. Comments made by Mr. Jorling as he questioned a food industry witness during one of these hearings, held in San Francisco, California on February 22, 1978, prior to the Agency's even proposing the 301(h) regulations, are illustrative in this regard. Involved was the effect the waiver could have on "pretreatment" costs for industries that discharged their wastes into ocean-discharging municipal treatment plants:

> [O]ne of the reasons uniform technological standards were adopted for both industries and municipalities was the uniformity and the desire to avoid economic advantage as a result of different pollution control requirements. Would your industry or members of your industry be concerned if there was relaxation of pollution control requirements in other areas with consequent major and significant reductions in user charges [costs] when competitors in adjacent areas would not take advantage of such reductions? * * * I'm suggesting that food processors in the Central Valley will not be able to take advantage of these reductions and your members will; that *there is a potential for distortion there that's bad public policy.*" (Emphasis added.)

As noted earlier, one of the basic principles of the 1972 Act altered by the 1977 ocean discharge waiver provision was the economic equity, or parity that the statute's uniform technology-based standards, such as secondary treatment for municipal discharges, provided. In effect, it appeared that Mr. Jorling was still debating the merits of the economic parity issue that stemmed from the section 301(h) waiver provison, even though the Congress had exercised its will on this matter two months earlier.

In response to this reference, Mr. Jorling, at the February 18, 1982 Subcommittee hearing advised:

> I think there are two points. One is that the policies of the statute itself, which was to keep pollution control from operating to the economic disadvantage of any private sector or public sector institution was not changed, and secondly the concern over industrial discharges into municipal systems and the [industrial] pre-treatment requirement.
>
> As you know, the Act calls for pre-treatment programs, and that those pre-treatment programs were recognized and even further pushed as a function of Section 301(h). The concern was that those industrial contributions to the publicly-owned treatment systems in marine municipal dischargers would have to meet very vigorous pre-treat-

ment controls as a way of one, protecting the ocean from the discharge of toxic pollutants and second, achieving that avoidance of economic impact or economic disadvantage that the statute attempts to avoid.[8]

Whether or not Congress' decision to adopt this amendment created economic or other disparities of any consequence,[9] Mr. Jorling's apparent unwillingness in February 1978 to accept Congress' prerogative to make this determination stands in sharp contrast to his comments to the Subcommittee on February 18, 1982, almost four years later to the day: "Often," noted Jorling, "when Congress authorizes it does so—very appropriately I might add—on the basis of national political judgment. Congress makes a determination that a general condition is remiss in some way and in need of repair." The subcommittee can only guess that Mr. Jorling apparently did not feel that Congress' judgment on this issue was appropriate in February of 1978.

"Our No Retreat from Secondary Position"

As noted previously, the Section 301(h) provision was included in the 1977 Clean Water Act in recognition by the Congress that in some cases, treatment of municipal wastewaters with less than full secondary treatment technology would be sufficient to meet the Act's water quality goals. Yet, a review of EPA files showed that those charged with developing the regulations to implement this provision apparently worked with a different mandate, or policy objective in mind.

Numerous references in internal agency documents, including that made in a key decision-making memorandum sent by Mr. Jorling to the EPA Administrator, strongly suggest that the primary concern of the rulemaking task force was to avoid regulatory concessions that "might weaken our no-retreat-from-secondary position."

In an April 7, 1978 memorandum seeking an approval on a draft of the proposed 301(h) regulations, the EPA Office of General Counsel's assignee to the 301(h) rulemaking task force, Ms. Lisa Friedman, described the task force's thinking to the General Counsel as follows:

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[8] It is of interest to note that the pretreatment program to which Mr. Jorling refers was actually adopted by the Congress in 1972, and at the time he made the comments in San Francisco in February of 1978, the program had yet to be implemented. In fact, as of the writing of this report, standards to carry out this 10 year old provision of the law have yet to be proposed for all but one or two industrial categories, and legislation to address what are seen as significant statutory and practical deficiencies in this pre-treatment program constitute one of the more controversial wastewater cleanup issues now being considered by the Congress. Therefore, any arguments in 1977 or 1978 that the 301(h) provision undermined or materially weakened the substance of the pre-treatment program were largely conceptual, as the program, for all practical purposes, had yet to be implemented as intended. Further, as will be documented in this report in a section discussing "BPWTT", studies critical to the pretreatment program's being carried out were years away from being completed.

[9] Other reports and studies point out, as did the witness before Mr. Jorling at the February 22, 1978 EPA hearing, that numerous other factors often have an equal or greater bearing on the cost of municipal wastewater treatment. Among the most significant are the higher costs that users in communities with new treatment and collection systems must pay due to the significantly higher costs of construction in recent years, as compared to the costs borne by those who receive treatment from older facilities, built during earlier periods of low interest rates and construction costs.

> Because Section 301(h) represents a significant departure from the technology-based philosophy of the 1972 Act, it is of major concern to the Agency.
>
> The implementation of Section 301(h) raises a host of difficult and complex policy and technical issues . . . The major legal problem posed by section 301(h) is as with many other provisions of the Clean Water Act of 1977, a difficult and conflicting legislative history. The House views the provision as a fairly broad exemption, the Senate as an extremely narrow one. Because Section 301(h) is a Senate provision, *EPA is following the Senate's lead and developing stringent environmental criteria for permit issuance.* (Emphasis added.)

In addition to its sharp contrast with Mr. Jorling's 1977 testimony that the provision was "too loosely written", this description of the task force's approach by Ms. Friedman, that of "following the Senate's lead", is also of interest in at least two other respects. First, as noted previously by Mr. Jorling, not only were there differences between the House and Senate conferees as to the stringency of narrowness of the ocean discharge waiver provision, but between many of the Senate conferees themselves, as well. Therefore, any claim that the task force's approach was based on the Senate's interpretation is dubious at best, since, according to Mr. Jorling's own testimony, the Senate Committee members were obviously not of one mind.

Second, Ms. Friedman's, and according to testimony, Mr. Jorling's rationale as to why the task force followed the "Senate's lead", conflicts rather sharply with one of Mr. Jorling's own opening remarks to the subcommittee on February 18, 1982, and a rather poignant one at that. Purporting to offer the subcommittee Members some guidance as to how Executive Branch officials must approach their charge when carrying out regulatory requirements established by the Congress, he advised:

> It takes among others, an open and candid relation with members, especially of authorizing committees of Congress, if administrators are to carry out their duty. It also takes a thick skin because any member can and usually does disagree with implementation—often because he or she sees the law one way, whereas *the administrator must see the law as an Act of Congress—all members.* (Emphasis added.)

The record before the subcommittee suggests that neither Ms. Friedman, Mr. Jorling, nor the other members of the task force, cared to follow that advice in 1978.

"Bright Lines"—The "Pros" and the "Cons".

The attitude of Mr. Jorling and the task force staff towards the waiver can be seen in the approach they adopted to develop the actual regulations for carrying out the provision, an approach that appeared to facilitate Assistant Administrator Jorling's stated preference to "apply controls as rigorously as possible . . ."

Stringent regulations were developed, regulations that excluded categories of communities from eligibility *even to apply* for waivers. For those that were deemed eligible, they also established rigorous requirements, to be met on a case-by-case basis, that would ultimately be seen by the Federal Courts as going beyond the law in certain instances, and by some applicants as constituting a false promise of hope for regulatory relief. Probably the most telling of these requirements were the so-called "bright-line" tests; regulatory criteria, developed by the task force staff, as a quick and ready basis for evaluating applications.

In her April 7, 1978 memorandum to the EPA General Counsel mentioned above, Ms. Friedman described how these bright line tests were to be used:

> The Agency will be utilizing a number of rather innovative approaches in this regulation to simplify and expedite decisionmaking. *One is "bright line" tests, minimum threshold requirements which will operate to screen out applicants early in the decisionmaking process.* (Emphasis added.)

When the regulations to carry out section 301(h) were proposed on April 25, 1978, they contained a number of these threshold requirements setting forth the various regulatory hurdles that would have to be met before an applicant community could obtain a waiver. Of the several bright line tests considered, each was judged on the basis of the degree to which communities would be automatically excluded from applying, and their chances of withstanding a Congressional uproar or court challenge. Some of those incorporated in the proposed regulations were carried through to the final regulations; others were dropped. Three in the final version were invalidated by the federal court.

Of the many involved, including those that were not included in either the proposed or final regulations, the bright line tests are of particular interest to the Subcommittee, not only because of their intended use, but because of the way in which the task force staff tended to characterize their positive and negative attributes, i.e., their "Pros" and "Cons." And in doing so they tended to show a biased attitude toward the waiver provision. Commented the subcommittee's Chairman, Elliott H. Levitas, during the February 18, 1982 hearing:

> The pros of a bright line test were always in favor of it [the test]. If the proposed bright line test favored an exclusionary event or set of circumstances, it was considered a "pro." If it didn't, it was considered a "con."

In effect, the rulemaking task force under the direction of Mr. Jorling, in developing the regulations, appeared to have focused heavily on how to keep communities from even applying for the waiver, rather than guiding communities in ways to comply with the numerous requirements set out in the statute. A review of some of these bright line test, and their assigned "Pros" and "Cons" are instructive.

One bright line test considered—although it was ultimately rejected and never incorporated into the proposed or final regula-

tions—is worth examining as a reflection of regulatory intent. It dealt with a confusing portion of the 301(h) provision which appeared to require the existence of applicable water quality standards for both the territorial sea, which extends out three miles from the shoreline, and the contiguous zone, which extends for another nine miles. Since states have authority only over the territorial sea (the first three miles), their water quality standards are limited in application and cannot extend to the contiguous zone. One option considered was a flat prohibition against a waiver for any discharge into the contiguous zone.

A task force memorandum to Mr. Jorling, dated March 1, 1978, unsigned and on the letterhead of the Office of General Counsel, disscused this option as follows:

> Pros: This is a simple bright line test which would automatically eliminate a number of California outfalls (including City of Los Angeles).
>
> Cons: We would be sued by those California municipalities which have contiguous zone discharges. Furthermore, we would probably lose since our construction of the statute is not a reasonable resolution of the conflicts on the face of the statute, given the purpose of and scientific basis for section 301(h).

The "pro" characteristic of this particular bright line test is also of interest because it would work to exclude at least one community that the EPA Administrator himself had indicated would at least be able to apply: Los Angeles, California.

At the previously mentioned September 16, 1977 hearing of the House Public Works and Transportation's Water Resources Subcommittee, Mr. Jorling, in response to questioning about the then proposed waiver amendment, noted: "We would prefer to confine any eligibility . . . to deep ocean discharges. That does qualify, in a sense, California and the other areas in southern California." And "Particularly Los Angeles," chimed in the then EPA Administrator, Douglas M. Costle.

Another bright line test involves an instance in which the most stringent option was selected and incorporated into the proposed regulations, only to be modified in the final regulations issued 14 months later. At issue was the definition of "existing discharge." Section 301(h) was intended to be limited exclusively to those communities which were in fact marine dischargers, discharging their treated wastes through ocean outfalls on the date of enactment of the 1977 amendments, December 17, 1977.

The question was whether applicants would be stuck with having their applications evaluated on the basis of the actual volume and strength of discharges and the location and configuration of their discharge structures, as existing in late 1977 (or on the date of application), or whether they could upgrade their treatment capability and relocate or extend their ocean outfalls to meet the water quality criteria of section 301(h).

The task force memorandum listed the following options:

(1) The applicant's discharge as of December 27, 1977—i.e., no changes may be made in the nature of treatment, location of the discharge, nature of the diffuser, etc.

Pros: This serves as a very neat bright line test for a large number of municipalities. For example, a number of California municipalities currently cannot even meet the revised California ocean plan without extending their outfalls and/or upgrading treatment * * *.

Cons: This test may cut out many small domestic dischargers (such as the Pacific Islands) which will have to relocate their outfalls or upgrade treatment in order to qualify for the modification. Also, our interpretation of the provision would be subject to legal challenge since arguably the "evidence" collected by coastal communities could include evidence on which a *predictive judgment* of the impact of a modified discharge could be made. Some communities have already made this argument to us.

The memorandum offered a second option, that of allowing limited modifications:

Pros: This would allow us to grant modification for small dischargers of essentially domestic wastes who will have to modify their discharge (e.g., moving it from a lagoon to deeper waters) in order to qualify for a modification. *This approach is also probably a more reasonable interpretation of the statute.* (Emphasis added.)

Cons: We lose a major bright line test . . .

Here again, the task force's preference for tests that are exclusionary is evident. In the first option, the "pro" characteristic is that it is a "very neat" method for quickly eliminating many communities. In the second, and less restrictive option, one that the task force itself acknowledges to be "a more reasonable interpretation of the statute," the "con" is that they would lose one of their highly exclusionary tests!

Another bright line test which was incorporated into the proposed regulations, and subsequently into the final regulations in modified form, dealt with discharges into so-called "environmentally stressed" areas. This was discussed in the following terms in the task force memorandum to Mr. Jorling dated March 1, 1978.

Pros: *This is an extremely useful bright line test since it eliminates virtually all discharges.* (Emphasis added.)

Cons: We will be inundated with letters from Congressmen and coastal (sic) dischargers alleging that there is no scientific basis for our position and that we are thwarting the intent of the statute. *We will not have a prayer of supporting this regulation in court without very strong technical support, and, even then, I think our chances of prevailing are slim . . .*

In defense of the use of the bright line tests, Mr. Jorling stressed that a major concern of the Agency at that time was to ensure that the 301(h) waiver provision would not be seized upon by local communities that had yet to comply with the law's original clean up requirements and deadlines, as a means for effecting delays. Com-

mented Jorling, ". . . cities could come in and at least delay just by filing the application."

Another factor raised in defense of the use of these threshold tests was a desire to limit the applicability of the waiver option to, in Mr. Jorling's words, ". . . those cities that made the case in the legislative history to be included . . ." It seemed that Mr. Jorling and his task force were intent on accomplishing through this rulemaking process what they failed to achieve during the lawmaking process. Commented an official of a small California community to Mr. Jorling and others at an EPA hearing on the proposed regulations in Seattle, Washington, on June 8, 1978:

> We feel that you structured these proposed regulations for the explicit purpose of accomplishing through regulation what EPA could not accomplish through law. You seem to desire to make treatment less than secondary illegal through regulation, while the Clean Water Act of 1977 had the clear intent of defining means for establishing the legality of less than secondary treatment for marine discharges. Clearly, you have stepped out farther than Congress intended in making it possible for small dischargers like Santa Cruz to apply for and obtain a waiver.

Indeed, the record before the Subcommittee and the decisions of the federal court on this matter which are discussed in Chapter V, make more than a prima facie case that the Agency's, as well as the task force's efforts were directed at limiting the application of this amendment. In fact, it appeared that the task force staff seemed to warm to its task of defending its "no-retreat-from-secondary" position and in finding ways to scare off, if not totally preclude, communities from applying for the waiver. Observed subcommittee Chairman, Elliott H. Levitas, during the February 18, 1982 hearings, in reference to the previously mentioned use of the "environmentally stressed" area test:

> One of the bright line tests utilized in that area was identified under the pros versus cons, as the pro being: *"This is an extremely useful bright line test since it eliminates virtually all discharges." It is as if there was a sort of excitement when they found it would eliminate just about everybody.* (Emphasis added.)

IV. The Chill Factor

Efforts to Intimidate

Another of the issues examined by the Subcommittee during its February 18, 1982 hearing was the extent to which the statements and actions of those responsible for carrying out section 301(h) of the act, were calculated to intimidate communities from applying for, as well as preventing them from obtaining waivers from the law's full municipal secondary treatment requirement. As noted in the preceeding section, Mr. Jorling and the rulemaking task force did attempt to limit the applicability of the waiver provision to those few communities that had been referenced in the legislative

history.[10] There is, however, considerable evidence that far more than suggests that the task force also sought to discourage as many communities as possible from even seeking an opportunity to run the gauntlet of statutory tests prerequisite to the granting of a waiver.

Consider, for example, that communities were faced with a tight deadline for getting their applications submitted to the EPA. The law allowed only 270 days. Additionally, there were considerable costs associated with the assembly of the necessary reports, data, and analyses that were being required by the Environmental Protection Agency, to fulfill the statute's requirement that the waiver applicant bear the burden of proof. Further, because it was experiencing great difficulty in finalizing the regulations—the final 301(h) regulations were issued almost a full year late—the agency was cautioning applicants not to wait; to get started with the gathering and development of the necessary data and analyses.

This, consequently, left potential applicants with only the proposed regulations, replete with the various bright line tests that had been developed "to screen out applicants early in the decision making process," for use as guidance. Commented the Subcommittee's Chairman at the February 18, 1982 hearing:

> The regulations which were proposed, I believe in late April 1978, created a situation that signaled any municipality seeking to avail itself of the waiver that it had to look at what was there at that time to find out what the rules of the game would be, so to speak. There were no final regulations. There were only proposed regulations.
>
> As I said in an earlier observation, one of the consequences of using requirements or criteria which were apparently exclusionary in nature—whether they were bright line tests or other requirements—was that they had a chilling effect on those who said in effect, "If that is the attitude of EPA on this, it is really not worth it for us even to make the effort to apply."
>
> I believe that that was part of the reason for the process. I believe that there was a sincere effort on the part, well-intended—I think misguided, but well-intentioned—on the part of the people in the EPA to discourage communities from applying.
>
> When they saw the proposed regulations, they [applicants] said in effect, "we don't have a prayer, so let's just forget it."

Indeed, such appeared to be the case to many municipal officials. Indicative of this were the coments of the general manager of the California Orange County Sanitation Districts, appearing as a witness for the Association of Metropolitan Sewerage Agencies at an EPA hearing on its proposed regulations held in Washington, D.C. on June 2, 1978:

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[10] As will be shown in a succeeding section of this report, the task force was more exclusionary in its efforts as the final regulations tended to exclude even some of those communities mentioned in the legislative history as being eligible.

> All EPA documents, statements, and proposed regulations treat Section 301(h) as though it is an unreasonable burden that was imposed on the agency and that care must be taken to ensure that no municipal agencies qualify, or if they do qualify, that the costs and risks will be so great the municipal system will not even want to file applications.

Included among the types of actions that reflect the concern of the Orange County official are the statements by Mr. Jorling before the House Subcommittee on Water Resources hearing in September of 1977, his December 7, 1977 letter to Senator Muskie, and his comments during the February 1978 San Francisco, California hearing, all of which have been mentioned previously. Interestingly, though, the most substantive evidence of what appeared to be afoot is contained in the proposed and final EPA 301(h) regulations themselves, and in the supporting documents prepared as part of the rulemaking process.

An example of one of these efforts to intimidate communities is the earlier mentioned "existing discharge" requirements in the law for which the Agency initially proposed a particularly narrow and restrictive bright line test. While the Agency ultimately softened its stance on this point when it issued the final 301(h) regulations more than a year later, it is interesting to note that the existing discharge definition incorporated into the proposed regulations clearly ran counter to the legislative history of this provision.

Both the Senate Committee Report and the "Joint Explanatory Statement" accompanying the Conference Report refer in identical terms to one of the statutory provisions of section 301(h). This required that applicants granted waivers use any construction grants funds available to them for, among other things, carrying out the purposes of the 301(h) provision:

> Use of funds appropriate to carrying out the purposes of the section might include infiltration and inflow work, interceptor construction and repair [either or both of which can materially affect the operation of the treatment works and hence the characteristics of the discharge], *and proper location of outfall lines.* (Emphasis added.)

This is clear evidence that modifications of treatment and discharge facilities were contemplated by the Congress, and moreover were considered grant eligible. In retrospect, therefore, it is of little surprise that when the final regulations were issued 14 months after their publication in proposed form, the EPA relented: "In response to . . . comments, EPA has reexamined the legislative history on this point," the agency said. Claiming that legislative history was not completely clear whether future outfall and treatment system improvements should be taken into account, it added:

> The communities which sought the modification provision had planned for and studied a less than secondary treatment alternative—in some cases for five to ten years—and had accumulated the data to make their case . . . in light of the foregoing, EPA believes that the most reasonable way to construe the term 'existing discharge' is

> to allow consideration of thoroughly studied and planned outfalls and/or treatment systems in evaluating a section 301(h) application.

Accordingly, the agency allowed existing discharges to use as a basis for evaluation thoroughly studied or planned outfall and treatment improvements.

> This revised two-part definition implements Congressional intent in a more reasonable manner than would have been the case under the proposed definition . . . *In contrast to the proposed definition, it will not be so inflexible as to bar permit modifications for large categories of existing discharges—a result Congress could have hardly intended.* (Emphasis added.)

In addition to the foregoing, EPA included references to two other issues in the proposed and final regulations in a manner construed by many to be a further signal *not* to apply. The first of these was the so-called "BPWTT" issue.

The 1972 Act required not only that municipalities achieve a minimum of secondary treatment of effluents by July 1, 1977, but also that they provide a higher, "best practicable waste treatment technology"—BPWTT—level of cleanup by July 1, 1983. Yet, when the Agency proposed regulations on this provision in March of 1974, it defined BPWTT as essentially secondary treatment! Nonetheless, the Agency in its April 25, 1978 proposed regulation on 301(h) cautioned applicant communities as follows:

> Additionally, POTW's [treatment works] are reminded that obtaining a modification [of] the requirements of section 301(b)(1)(B) [secondary] of the Act *in no way relieves them of the responsibility of complying with* the requirements of section 301(b)(2)(B)—adoption of *best practicable wastewater treatment technology (BPWTT) by July 1, 1983.* The Agency is presently considering redefining BPWTT to emphasize the removal of toxic pollutants and recycle/reuse of wastewater. While some of these alternatives (such as recycle/reuse) may be achievable without secondary treatment, in individual cases, in others (such as advanced waste treatment), secondary treatment may be a necessary interim step in the attainment of BPWTT. POTW's should, therefore, consider whether they are likely to fall into this latter category, and, if so, what the construction of secondary treatment facilities is likely to cost if it is postponed for several years. (Emphasis added.)

Similarly, in the June 15, 1979 final 301(h) regulations, the Agency again cautioned:

> The legislative history of section 301(h) and the Act itself, however, make it clear that section 301(h) only authorizes a modification of the requirements of section 301(b)(1)(B) [secondary] of the Act, and not of the BPWTT requirements. . . .

* * * * * * *

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> At present, BPWTT is considered equivalent to secondary treatment. The Agency, however, is now considering expanding the definition of BPWTT to include specific effluent limitations for toxic pollutants and also to provide for the recycle and reuse of wastewater as required under section 201(g)(2)(A) of the Act and confined disposal of pollutants.

In contrast to these admonitions, there are certain facts that raise questions about the basis, as well as the motive, for the Agency's including these comments in the proposed and final regulations.

First, with respect to the comment about controlling toxics, the EPA had entered into a consent decree to address, among other things, toxic chemicals in municipal treatment plants in June of 1976, long before the 1977 amendments were enacted. The two studies which EPA was preparing to initiate to address this toxics problem, according to EPA staff involved at the time, grew from that consent decree effort. While some claim that these studies can be cited as a basis for imminent changes in the BPWTT definition, their costs, and completion schedules suggest that they cannot.

The first study, a $1.5 million six-city survey to identify toxic chemicals in treatment plant influents, wasn't initiated until May 26, 1978, a month after the 301(h) regulations were proposed, and the second $3.5 million "forty city" survey initiated in July 1978, was still incomplete when the subcommittee held its February 18, 1982 hearing. The extent that either of these efforts could have resulted in any near-term modification to the then existing definition of secondary treatment of BPWTT was at best speculative!

The Agency's assertion that the Act and section 301(h) made clear that the amendment was not addressing waivers to the law's 1983 BPWTT provision is similarly questionable. Rather, there was, until recently,[11] considerable question about this, due to the fact that the Statement of Managers, that is, the explanation of the compromise bill the Conferees filed with the House and Senate in December 1977, included the following comments with respect to the section 301(h) amendment:

> For those communities which can show that existing deep marine discharge requires less than secondary treatment, a case-by-case review waiver is provided. Such a waiver would be based on stringent criteria discussed below. *The waiver would be reviewed every 5 years to assure continued compliance with these conditions.* (Emphasis added.)

Indeed, it appeared that the Conferees expected qualified communities to be able to retain their "less-than-secondary" status long after the 1983 BPWTT deadline.

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[11] Note: Many believed that since the Agency had never defined BPWTT as anything more than secondary treatment, and that 301(h) was for providing waivers from secondary, that there was no conflict in substance. Nonetheless, the continued question as to the need for BPWTT was finally resolved last year when, in amending the Construction Grants Title of the Act, the Congress deleted the BPWTT provision altogether. Interestingly, in the nine year period during which the BPWTT provision was in the law, it was never defined by EPA as anything other than secondary.

The second issue referenced in the regulations so as to discourage applications was with respect to enforcement of the law by the EPA. As noted previously, communities were to have secondary treatment in place by July 1, 1977, and BPWTT by July 1, 1983. In issuing the proposed 301(h) regulations, EPA felt compelled to note that unsuccessful applicants would still be held to their current compliance schedule, notwithstanding delays in acting on applications by the EPA:

> Finally, applicants which do not qualify for a modified permit and have delayed construction of secondary treatment pending EPA action on their application are reminded that they may be issued enforcement orders or may be subject to other enforcement actions under Section 309 of the Act to assure that construction is completed according to schedules of compliance contained in their existing NPDES permit.

And in the final 301(h) regulations, this "activist enforcement" posture was further extended to warn those who did succeed in obtaining a waiver:

> Violations of section 301(h) modifications will be among *the highest priorities* in EPA's municipal enforcement program. Compliance schedules will be closely montiored by the Agency and NPDES [National Pollutant Discharge Elimination System] States; a permittee's failure to meet planning, design or construction schedules, or to comply with any monitoring, pretreatment or nonindustrial source requirements will subject it to possible enforcement action, *including revocation of its modified permit.* (Emphasis added.)[12]

In sharp contrast to this get-tough posture by EPA is the fact that approximately half of the nation's municipal dischargers, including many of the nation's largest cites, did *not* meet the 1977 deadline, nor are they likely to do so in the near future. In fact, the Agency's municipal enforcement program has historically been considered a paper tiger operation, a point acknowledged by every EPA Administrator since the Agency was established more than ten years ago.

The Congress itself also recognized that some consideration would have to be given to the lost time that would inherently be involved in the 301(h) process, a point noted by the U.S. Circuit Court of Appeals in the May 1981 decision[13] on the 301(h) suit brought by the Natural Resources Defense Council (NRDC):

> The second serious flaw in NRDC's argument is that it ignores the period of non-compliance assumed in the statute itself. Congress knew that thousands of municipalities had not met the July 1, 1977 deadline . . . Congress authorized coastal municipalities to apply for section 1311(h)

[12] The 1972 law established a national permit program, the National Pollutant Discharge Elimination System (NPDES), under which the EPA issued permits containing clean up requirements and schedules to dischargers. Under the law, EPA could delegate the responsibility for carrying out the NPDES permit program to states.

[13] *NRDC* v. *EPA*, ——— 2d, ———. (11 ELR 20487) (D.C. Cir., 1981).

> [301(h) codified] permits, and did not restrict the eligibility of municipalities not in compliance with the July 1, 1977 deadline. Congress itself recognized that noncomplying municipalities would apply for section 1311(h) permits . . . Therefore a period of non-compliance was assumed for at least some section 1311 applicants. Under NRDC's interpretation no period of noncomplicance can be allowed, yet Congress itself assumed such a period.

When confronted during the February 18, 1982 hearing with the allegation that the task force attempted to create a chilling effect by making the proposed 301(h) regulations as restrictive as possible, Mr. Jorling replied as follows:

> Information was generated as part of the rulemaking process, not as an attitudinal thing, but simply to say to people what do we know about the oceans, how can we make that eight-part [statutory] test work? That is what we were using the proposed rulemaking process for.
>
> On the question of attitude. Well, you could say it wasn't reasonable for the rules to be proposed as the way they were. It is possible to respond, also, to say that the statute wasn't reasonable because it could not, if literally interpreted, be applicable to any situation in the country.
>
> We were faced with that difficulty from taking it from one extreme of nullity, not to take it to the other extreme of total nullity in which everybody could apply and be granted a waiver. We tried to make sense of it and in the end, I think we did a very good job with the caveat that I am sorry and very regretful that it took so long.
>
> * * * * * * *
>
> As far as your concern about the communities that would say, "Oh, it's so elaborate and time-consuming and we are not going to apply," If they had that feeling, then it didn't mean a great deal to them.
>
> But it did mean a great deal to most communities that were involved and the California figures alone, if I remember, were 600 million dollars.
>
> If a community came to me and said your proposal is so strict that I am not going to bother to participate, I would say, come on, then you haven't made a very good case you are entitled to relief. If it is important to you, if it is a $10 million investment, you are going to find it worthwhile to participate.
>
> That was pure political rhetoric and dialogue that goes on between public officials.
>
> I think we were very serious in trying to make the provision work as it was intended to work by Congress.

The subcommittee agrees with Mr. Jorling, so far as he argues that the costs of applying, given the considerable, often multi-million dollar savings, are an inadequate basis for claiming that the Agency sought to discourage applicants by requiring that they provide substantial amounts of data. Indeed the law does place the burden of proof on the applicant. However, with respect to Mr.

Jorling's contention that the Agency was relying on the rulemaking process to determine just how the law's eight prerequisites to a waiver were to be implemented, the record before the subcommittee suggests otherwise. In fact, in several instances, the Agency staff, specifically those involved with, or assigned to the task force, were well aware before the proposed regulations were issued, that many of their proposed requirements, be they bright line tests, or others, were inappropriate.

Malice Aforethought . . . ?

Contained in the reports, memoranda and other support documents developed as part of the 301(h) rulemaking process are a number of comments or statements that clearly point out that members of the task force headed by Mr. Jorling were well aware that many of the bright line tests or other requirements included in the proposed 301(h) regulations were not supportable in the courts or in the technical community. As to why this group of professional EPA staff, a group of individuals that Mr. Jorling described ". . . as competent and dedicated as any group of private or public employees could be . . ." facilitated this activity is a question that remains unanswered. However, the facts themselves are seen by the subcommittee as further evidence of the task force's, and particularly Mr. Jorling's apparent preference to maintain the "no-retreat-from-secondary position."

As noted previously, the task force, in its March 1, 1978 memorandum to Mr. Jorling describing the "Pro" and "Con" attributes of the various bright line tests included in the proposed regulations, warned under the "Con" argument of the "environmentally stressed areas" test that: "We will not have a prayer of supporting this regulation in court without very strong technical support, and even then, I think our chances of prevailing are slim." Nonetheless, the proposed regulations contained this stringent exclusionary test.

Similarly, the agency was well aware before the fact that its proposed definition of "existing discharge" was not the most reasonable interpretation. Warned the task force staff via its discussion of the "Pros" of a more moderate, second definition: "This approach is also probably a more reasonable interpretation of the statute." Yet again, this advise was ignored. The more stringent definition was incorporated into the proposed regulations, only to be recanted in the final regulations 14 months later.

In another, and possibly more striking example, the EPA again went forward with a very restrictive requirement, moderating its position in the final regulations well after the "chilling" damage had been done. At issue in this instance was the determination of what constituted "deep" ocean waters.

The identical language of the waiver provision contained in both the Senate bill and the final Conference Report, stated that "the discharge of any pollutant into marine waters' refers to a discharge into deep waters of the territorial sea or the waters where there is strong tidal movement and other hydrological and geological characteristics . . ." necessary to achieve the various requirements and water quality goals of the law. In discussion of these points, these documents go on to note that:

> Depth is a key factor in determining the amount of circulation in waters of the territorial sea or contiguous zone. Circulation in turn affects the degree to which waste water discharges to these waters are rapidly dispersed. In some instances, depth of water in the territorial seas or contiguous zone in excess of 200 feet is necessary to achieve sufficiently rapid dispersion (i.e., 45 seconds) of waste water and waste water constituents. In some instances, depth of 200 feet is insufficient to provide adequate dispersion. Poor net flushing (i.e. stagnation) of a deep basin may cause undesirable vertical cycling of discharges.

Of interest, though, is that nowhere here is there any assertation that a depth of less than 200 feet would be insufficient.

Nonetheless, when the Agency issued its proposed regulations on April 25, 1978, it included a requirement generally interpreted as specifying a minimum depth of 200 feet for discharge outfalls. The proposed regulations stated as follows: "Initial dilution must be of the order achieved by accepted designs of multiport ocean outfalls at depths of approximately 200 feet or greater, and must be achieved within minutes of discharge."

Once again, however, the agency ultimately relented, when it published the final regulations more than a year later, broadening its definition so as not to exclude numerous communities. Commented the Agency in the preamble to this later regulation:

> There is no minimum depth limitation, short of a very shallow one, which would conclusively preclude the attainment of these statutory objectives in every case. For example, a POTW [publicly owned treatment works] with a low volume, essentially domestic flow might be able to meet these objectives in fifty feet of swiftly moving, well flushed ocean waters; for a larger discharger, two hundred feet might be required. As a result, EPA has been unable to establish a scientifically defensible minimum depth limitation for inclusion in the final regulations.
>
> * * * * * * *
>
> The only depth figure which appears in the legislative history of section 301(h) is "two hundred feet", (see e.g., 1977 Leg. Hist. at 259 and 322), the approximate depth of the outfalls of the California POTW's which testified in support of a modification of secondary treatment requirements for marine dischargers. However, there is no evidence that Congress intended this figure to establish a minimum depth for ocean discharges. Furthermore, such a limitation would automatically preclude all but approximately half a dozen ocean dischargers from even being considered for a modification.

This might be taken as a welcome, if an albeit belated awareness of scientific realities on EPA's part. However, there is documentary evidence indicating that EPA officials were quite aware of the lack of scientific defensibility of its 200-foot depth language in the proposed regulations. A paper entitled "Preliminary Concepts for Reg-

ulating Modification to Secondary Treatment Requirements for Ocean Outfalls, per Section 301(h) of the Clean Water Act," authored by D. J. Baumgertner, a 301(h) task force member, and drawing on the work of others in the agency, said:

> Numerical guidance provided in the legislative history as to actual depth considered appropriate is limited to one citation of 200 feet. There is no doubt that this reference is with respect to initial dispersion in the buoyant plume region only, because the example given (45 seconds) cannot be construed as encompassing any other mechanisms. Given that all other factors associated with effective flushing normally occur at the site, 200 feet would be generally expected to provide sufficient depth for a satisfactory design.

In a footnote to this paragraph which its author, Baumgertner, claimed was intended to caution against the use of any minimum depth number, he said. "This doesn't say a depth less than 200 feet would be unacceptable, but at this point in our deliberations it would be better to be silent."

In response to the Subcommittee's contention that the Agency went ahead and included highly restrictive requirements in its proposed 301(h) regulations even though it knew that many of them were legally or scientifically indefensible, Mr. Jorling, claiming that the subcommittee ". . . obviously had an exhaustive look at the complete set of documents that accompanied this record," went on to argue:

> You have found one in which a staff person wrote a sentence in which it appears that the best way out was to negate the provision.
>
> I have a feeling that staff people have an element of humanity in them that sometimes they will say in the sentence something in a graphic way like that which says, it is obviously not the way to go. Therefore, they write it that way. I have done that as a staff person and simply said, this is an easy way out, it negates the provision.
>
> I wouldn't seize on that as a reflection of the attitude.
>
> * * * * * * *
>
> The point is, how does an agency respond to a statute which is admittedly interpretable in many different ways? How does it make that work?
>
> On the reference to defense of the regulations—as you know the agency has been over the last decade the most litigated agency in the Federal Government. There are very strong statements from the courts as to what constitutes defensible regulations, and that defensibility is something that preoccupies the agency in writing rules, as I think it must.
>
> So where there is not a good, factual, evidentiary basis for a decision that the agency takes, whether it be, in the words we have been talking about, a pro or a con, the lawyers had an obligation to point that out, and where they did, I would take it very seriously.

Mr. Jorling's response in this instance fails in at least two significant respects, and tends to further confirm the subcommittee's earlier misgivings as to the intent of those involved when they set about the task of developing the rules and regulations to carry out the section 301(h) waiver provision.

First, the subcommittee's concerns do not stem simply from a single sentence by a staff person seeking to point out a particular option, as Mr. Jorling suggests. Rather, as noted earlier in this report, they flow from the collective set of documents identified by the Subcommittee, not the least of which is the decision-making package used by Mr. Jorling himself, and the EPA Administrator, in approving the proposed 301(h) regulations. Additionally they stem from statements in the proposed and final regulations and their explanatory preambles formally issued by the EPA in the Federal Register as the Agency's public declaration of intent in the case of the former, and rule, in the case of the latter.

Second, while some portions of section 301(h) can be interpreted in different ways, particularly with respect to how stringently the various statutory conditions for a waiver were to have been defined and applied, there is apparently no "factual, evidentiary basis", or statutory basis for that matter, for adding certain, highly exclusionary, categorical "prohibitions" to the eight waiver prerequisites contained in the 1977 Act. Yet, as will be discussed in the next section of this report, the Agency did just that when it issued its final regulations on June 15, 1979, in an apparent attempt to further limit the applicability of this amendment to as few communities as possible.

V. Substantive Barriers; Interpretations ". . . Contrary to Law."

Rulemaking? . . . or Lawmaking?

As noted in the introduction of this report, the delegation of rulemaking authority is frequently a delegation of lawmaking authority as well, allowing Executive Branch agencies opportunities to make decisions on those issues the Congress was either unable, or unwilling to make itself. In this regard, the Section 301(h) waiver provision is an excellent example. Noted Mr. Jorling, during his February 18, 1982 appearance before the Subcommittee:

> Could we do what Congress was unable to do, define terms which described the universe of applicants? In retrospect, I would have preferred for Congress to say, these specific communities should be eligible to come in for a waiver. But we didn't have that luxury. We had to define it [marine discharge] and the relationships among terms were very close.
>
> If you define marine discharge one way and existing discharge one way, it changed the entire distribution of potential applicants.
>
> Many of the communities, after the law was enacted, said "Hey, maybe we qualify for this."
>
> But if you go back to the legislative history, it was those communities which had made the case that their dis-

> charges do not cause an adverse impact on the biota of the ocean, that were intended to be included in the 301(h) program. So we were trying to deal with that in a reasonable way. I think in the end, we did.

Notwithstanding this evaluation by Mr. Jorling, the May 7, 1981 U.S. Court of Appeals ruling, mentioned previously and discussed in more detail in the following paragraphs, suggest that the EPA's efforts to carry out this provision of the 1977 Clean Water Amendments were not reasonable. In fact, the Court's opinion, when viewed in conjunction with the additional evidence discussed previously, continues to suggest that the Agency's goals were to both limit the number of communities that would ultimately be successful in obtaining a waiver under section 301(h), and to minimize the administrative burdens that would be inherent in a less restrictive approach, whereby communities would be judged on a case-by-case basis, as was clearly aniticipated by the Congress.

The Prohibitions.

In adopting the ocean discharge waiver provision in 1977, the Congress reverted, at least partially, to the earlier process of assessing the impact of individual discharges on the receiving water body, in this instance, marine, or ocean waters. Further, in describing how this exception to the 1972 Act's uniform, technology-based, municipal treatment standard was to be applied, the House and Senate Members noted in their "Joint Explanatory Statement" that accompanied the compromise bill developed during the 1977 Conference on the Clean Water Act bills: "For those communities which can show that existing deep marine discharge requires less than secondary treatment, a *case-by-case* review waiver is provided." (Emphasis added.) Observed Subcommittee Chairman Elliott H. Levitas during the February 18, 1972 hearing:

> . . . as I view 301(h)—whether it was good or bad policy—it has as its major thrust the concept of letting communities apply for waivers and be considered on their own merits, yes or no, up or down.

Notwithstanding this, the final regulations issued by EPA on June 15, 1979 precluded communities seeking to discharge wastewater with less than primary [14] treatment or sewage sludges, and communities that had already achieved secondary treatment, from being eligible for a 301(h) waiver. Further, in the preamble to these regulations, the Agency warned:

> These requirements are "threshold" criteria which, if not met, will constitute grounds for denial of the modification. [Treatment Authorities] are advised to review these requirements and determine if one or more present a problem before undertaking the expense and time of preparing an application.

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[14] In contrast to secondary treatment which generally is capable of removing or biodegrading about 85 percent of most pollutants, primary treatment is capable of removing only about 30 to 40 percent of the "suspended" solids present in domestic sewage, essentially by letting the wastewater stand in large tanks and allowing the solids to settle out.

Following the publication of these final regulations, several parties sued the EPA complaining that the rules were either too broad, or too restrictive. Among the plaintiffs were several communities adversely affected by the two eligibility prohibitions mentioned above: waivers for less than primary or sewage sludge discharges and for plants with existing secondary treatment already in place.

On May 7, 1981, the U.S. Court of Appeals, under the several suits involved had been consolidated, issued a decision *(NRDC* v. *EPA,* ———F.2d,———, (11 ELR 20487) (D.C. Cir., 1981.)) upholding the EPA 301(h) regulations, *with the exception of the prohibitions.* These were ". . . remanded to the Administrator for further proceedings consistent herewith." Given the standard of review applied by the Court in this instance, this decision is of particular note. Advised the Court:

> The role of this court in reviewing the propriety of regulations issued under the Clean Water Act is narrow. *The regulations may be set aside only if they are "arbitrary, capricious, and abuse of discretion, or otherwise not in accordance with law . . ."* 5 U.S.C. §706(2)(A) (1976). The agency is charged with deference in its construction of the Act's terms and requirements . . . (Emphasis added.)
>
> However, this court will not act as a rubber stamp. The Agency must follow the established rules of statutory construction . . . Our duty is to see that the congressional mandate is carried out, and misinterpretation of that mandate will be corrected. . .
>
> The issues presented by this case are to a great extent issues of statutory construction. Where the Administrator's interpretation of the Act coincides with the purpose and intent of the statute we defer to his construction. Where the issue presented involves questions of scientific expertise or a choice between reasonable interpretations of the statute we defer to the Administrator's interpretation; *however no amount of deference can justify an interpretation of the statute that is contrary to law.* (Emphasis added.)

In response to questions about these prohibitions and the May 7, 1981 order, Mr. Jorling argued that the Court's decision to remand these particular prohibitions was largely inconsequential. Claiming that he had "read that opinion and spent considerable time evaluating it and going back and reviewing the rulemaking activities and before that, the legislative history," he admonished the Subcommittee further as follows:

> The two points on which the agency action was overturned were two points which were not important in either the legislation, the legislative process or in the rulemaking.
>
> If you will recall, if you go back through the legislative history, there was simply no one who raised the question whether or not already achieving municipalities—that is, those reaching secondary treatment—should be permitted

to use these mechanisms to turn that [treatment] system off.

It was simply not in the legislative history. It became part of the rulemaking because people began to advance that question to the agency and obviously we had to confront it.

The second theme which was a variance from secondary treatment for the treatment of sludge was again not in the legislative history. It became part of the rulemaking activity but since sludge discharges are not subject to secondary treatment, I confess to a logical impossibility of how they could be relieved from that requirement in order to take advantage of section 301(h).

Interestingly, the Courts discussion of the remanded prohibitions, and its reasoning for doing so, include, among other points, rebuttals to Mr. Jorling's arguments. With respect to the lack of legislative history on the issue of waivers to communities that had already acheived secondary treatment, the Court makes reference to Mr. Jorling's own December 7, 1977, letter to Senator Muskie discussed earlier in this report, as well as other citations:

The Administrator argues that the legislative history "does not suggest that in enacting [section 1311 (h)] [15] Congress meant to sanction a retreat or 'backsliding' where statutory goals had already been achieved." (Br. for EPA at 62) On the contrary, there is some indication that the Agency and the Congress knew that the terms of section 1311(h) would allow plants performing at the secondary treatment level to apply. The Assistant Administrator for Water and Hazardous Materials [Mr. Jorling] sent a letter to Senator Muskie which listed cities in California as potentially eligible under section 1311(h). That list includes at least one water district that had achieved secondary treatment—Marina County Water District, California . . . If secondary treatment achievement was a factor the Agency should have excluded the Marina County Water District. Further, Congress knew that many municipalities had achieved secondary treatment, . . . yet Congress showed no inclination to exclude them from the benefits of section 1311(h).

Senator Gravel submitted a statement during the Senate debate on the conference bill which included the following comments:

When I introduced the measure I did not intend to limit the application of the provision to Anchorage, Seward, and a few other cities. I intended to allow any city that can meet the geographical requirements to come forward and attempt to prove their case. *(That might even include communities currently under schedule to provide traditional secondary treatment.)* That is my understanding of the conference's intention as well.

3 Leg. Hist. at 535 [emphasis added].

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[15] Section 1311(h) is section 301(h) of the 1977 at, as codified in the U.S. Code.

> We think the Administrator's decision is arbitrary and capricious in that it unreasonably prohibits applications from those cities that have achieved secondary treatment. Treatment plants that are under schedule to achieve secondary treatment are eligible to apply for a permit. See Senator Gravel's comment, supra. A treatment plant that has expended the funds to achieve secondary treatment levels is eligible to apply for a permit . . . Thus, the amount of money expended to achieve secondary treatment is irrelevant under the Administrator's scheme. A treatment plant that did not even attempt to achieve secondary treatment is eligible to apply because it has not achieved secondary treatment. However, a treatment plant that attempted to comply with the statutory mandate, 33 U.S.C. § 1311(b)(1)(B) (1976), and did so successfully, is not eligible. The Agency is rewarding failure and punishing achievement.
>
> The regulatory scheme penalizes treatment plants that complied with the statutory deadline. A plant that met the deadline cannot apply for a permit, and reduce costs if the permit is granted, for no other reason than that it met the deadline. Nothing in the statute indicates that Congress intended such arbitrary and potentially wasteful distinctions to be made. The regulation prohibiting the issuance of permits for plants that have achieved secondary treatment cannot stand.[16]

In addressing the issue of why it felt that the waiver provision should be interpreted as applying to communities seeking to discharge sludge through deep ocean outfalls, or providing less than primary treatment, the Court not only responds to Mr. Jorling's "logical impossibility", it adds further comment concerning how one should approach the absence of information in the legislative history:

> The final regulations prohibit the issuance of a permit under section 1311(h) for the discharge of sewage receiving less than primary treatment or for the discharge of sludge . . .
>
> The Pacific Legal Foundation [one of the plaintiffs] argues that these prohibitions embody a misinterpretation of the statute. Primary treatment is "the first stage in wastewater treatment where substantially all floating or settleable solids are removed by flotation and/or sedimentation." 40 C.F.R. § 125.58(m) (1980). Sludge is solid material that is removed from sewage during treatment . . .
>
> Section 1311(h) states that:
>
> The Administrator . . . may issue a permit . . . with respect to the discharge of *any pollutant* in an existing discharge . . .

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[16] Another community cited in the December 7, 1977 letter to Senator Muskie from the Assistant Administrator Jorling that had already achieved a form of secondary treatment was Avalon, California.

> 33 U.S.C. § 1311(h) (Supp. II 1978) [emphasis added]. The Act defines "pollutant" to include both "sewage" and "sewage sludge" . . . The definition of "pollutant" in section 1362(6) was part of the 1972 Act . . . Section 1311(h), added in 1977, contains no special definition of "pollutant". Because an amended act should be read as a whole, . . ., the definition of pollutant in section 1362(6) applies to the use of the same term in section 1311(h). It is as if the amendment was part of the original act . . . On its face, therefore, section 1311(h) authorizes the issuance of a permit to discharge sewage or sludge if the applicant can meet the other conditions of the section.
>
> *The Administrator attempts to avoid the plain meaning of the statute by means of legislative history and policy arguments. Upon close inspection, however, the legislative history does not support the Administrator's position.* The practical result of a literal interpretation of the statute is not absurd or futile. For this reason the policy arguments are insuffient to contradict the language chosen by Congress. (Emphasis added.)
>
> The Administrator relies on a statement by the Senate sponsor of the bill which became section 1311(h) [301(h)] to the effect that the bill would create a narrow exception to the uniform secondary treatment requirement of the Act . . . The Administrator also states that nothing in the legislative history of the 1977 amendments affirmatively supports the discharge of untreated sewage or sludge . . . Neither of these arguments can change the language of the statute and this court cannot ignore that language. *Legislative silence is not a reliable indicator of congressional intent* . . . (Emphasis added.)

The Administrative Burdens.

With respect to the question of the administrative burdens that the section 301(h) provision would pose, Mr. Jorling's comments about why the task force seemed to prefer bright line tests that operated "to screen out applicants early in the decision making process" are instructive:

> This provision takes place against a backdrop that is heavily stressed in the Senate language and Senate report and Senate debates, Section 316 [Thermal Discharges], which was the first relaxation from the technological base standard.[17] In the period 1972 to 1977, the Section 316 program had fallen into a quagmire of nonimplementation, that the shift back to ambient standards is such a time-intensive, complicated, scientifically and in every other way that it can't be done.
>
> Their [the task force's] reference was don't let 301(h) become that kind of a program. It does reflect, I think on

[17] Section 316 of the 1972 act allowed case-by-case modifications of thermal pollution control requirements upon a showing by the applicant that conditions similar to those set out in section 301(h) could be met. It was essentially restricted to "heat" whereas 301(h) allowed waivers for several other pollutants.

> the general question of the difference between a technological standard and an ambient standard.

The subcommittee acknowledges that determining discharge control levels on the basis of ambient, or water quality based assessments, as called for by both section 301(h) and the 1972 statute's thermal discharge waiver provision is resource and time intensive, and scientifically complex. However, that approach was nonetheless specifically authorized by Congress as an option that would be available to qualified dischargers that cared to exercise the right to apply for it.

This particular point was also recognized by the Appeals Court in the May 7, 1981 decision, in its "Background" discussion about the law, and section 301(h):

> The 1972 Amendments to the Federal Water Pollution Control Act drastically altered the federal approach to water pollution. The emphasis on maximum tolerable pollution in the waters was abolished, and in its place was substituted a permit system imposing direct restrictions on each source of pollution . . . The 1977 addition of section 1311(h) [301(h) codified] reflects a return, at least in part, to regulation of pollution by means of scrutiny of the impact of the polluter's discharge on the receiving waters. This is most clearly reflected in the language of section 1311(h)(2).

VI. Conclusions and Observations

Addressing many of the nation's problems will, in the future, undoubtedly call for complex solutions, solutions that will inevitably be increasingly technical or scientific in nature. Consequently, it can be expected that Congress will continue if not increase, its past practice of delegating the details of many of these decisions to Executive Branch agencies for final resolution.

In certain respects, this delegation of decision-making responsibility to rulemakers should be looked upon as a constructive, even healthy approach to governing at the national level. It should not be the purpose of Congress to conduct laboratory research, nor to subsume the role of the scientific or technical community. Rather, it should be Congress' purpose to set national goals and priorities, and to enact laws; and in so doing, to make political judgements on issues that establish national values and direction.

The experience with the 1977 Clean Water Act's section 301(h) ocean discharge waiver provision, however, continues to underscore the fact that the Congress' activities can not simply stop there. It must maintain close oversight of the Executive's departments and agencies, and of the actions and comments of the officials who conduct the rulemaking process to ensure that their activities and results are in accord with the intent of Congress. But, classic Congressional oversight, by itself, is often not enough.

As discussed in the preceding pages of this report, the legislative histories of many Congressional acts are often silent, or ambiguous at best, as to just what is truly intended, particularly with respect to issues that are value oriented and scientific or technical. Fur-

ther, Executive Branch officials are afforded considerable latitude as to how a given statutory requirement is to be carried out. In such cases, opportunities abound for administrators, particularly those that may personally or philosophically oppose a particular provision of law, to influence significantly the shape of the final rule and ultimately, the effect of the law itself. And long before the courts or the Congress may act to redress a perceived problem, much of that necessary to thwart the intent of Congress, or at least the intent of some of those in Congress, many have already been aaccomplished, temporarily, if not permanently. The results of EPA's efforts to carry out the Clean Water Act's section 301 ocean discharge waiver provision are a case in point.

Had the EPA intended to fully implement the law, it would have, as a minimum, ensured that any community desiring to exercise its option of applying for a waiver would have had the opportunity to do so. Yet, the EPA consciously chose to do otherwise, and in doing so, precluded many communities from availing themselves of an opportunity to seek the relief offered by Congress. Additionally, according to the record before the subcommittee, the collective set of public statements by EPA officials, and the various and several requirements set out in the proposed and final section 301(h) regulations and their supporting documents, worked to discourage others from attempting to seek relief from the law's full secondary treatment requirements.

Ironically, the result of the EPA's approach to implementing section 301(h) has been the filing of numerous lawsuits by applicants and others, and extended litigation, not the expeditious construction of full secondary treatment facilities by the disenfranchised communities. Hence, to the extent that those involved were intent on precluding communities from delaying compliance with the law's clean up requirements, it can only be said that they failed in most if not all instances.

The record of what has transpired under the ocean discharge waiver provision of the 1977 Clean Water Act Amendments is also difficult to construe as one of a federal agency helping local governments address their needs. Rather, it appears to be more one of self-serving actions by bureaucrats, not directly accountable to the public, who where primarily intent on cirumventing an act of Congress under the guise of avoiding the red-tape "quagmire of nonimplementation" that was feared would flow from a less restrictive and more flexible approach.

The subcommittee is compelled to caution, however, that no instance of bureaucratic tinkering with Congressional intent in the rulemaking process is so simple, so black-and-white, as to suggest that such actions by themselves, necessarily constitute misfeasance or malfeasance. Indeed, as the record of the implementation of section 301(h) shows, there were numerous other factors involved.

Ambiguous legislative histories are creatures of the Congress, not the Executive. The delegation, or perhaps more appropriately, the deferral of key or sensitive decisions and details to the Executive and its rulemaking process for what ever reasons, are acts of the Congress, not the Executive. Yet, to the extent that administrators choose a course and direction, and take from the legislative histories that which they deem appropriate to fulfill rulemaking respon-

sibilities delegated to them, they should be held accountable, for these actions are their's, and their's alone.

In closing his formal statement presented at the February 18, 1982 hearing, Mr. Jorling, who, as noted in the text of this report, headed the EPA task force resonsible for implementing the section 301(h) ocean discharge wavier provision of the 1977 Clean Water Act Amendments, also highlighted the importance of holding presidential appointees, such as he was, personally accountable for their actions. Advised Mr. Jorling:

> In my view, presidental appointees—should be held strictly accountable—and unless they are, no amount of "reform" will do anything more than exacerbate the problems of government. If they are—then the reforms are not necessary. To be strictly accountable, appointees—that is those with the responsibility to implement the law—should know in the statutes they implement; they must interact constantly with the members of Congress of all sides and parties, especially in the authorizing committees.
>
> The administrators must be deeply involved in the rulemaking process. In a real sense it must be their process—it is their decisions the courts hold accountable.

To this, the subcommittee would only add that it is also their decisions to which the Congress holds them accountable. And to the extent that the Congress continues to delegate critical decisions to the Executive Branch's rulemaking process, the Congress must also enhance its efforts, and its tools, to effect the necessary oversight so as to ensure true accountability for the actions of those charged with the public's trust.

Approved:

ELLIOTT H. LEVITAS, *Chairman.*
DONALD JOSEPH ALBOSTA.
GERALDINE A. FERRARO.
WILLIAM HILL BONER.
BUDDY ROEMER.
RONNIE G. FLIPPO.
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HAROLD C. HOLLENBECK.
GUY MOLINARI.
BOB MCEWEN.

AFTERWORD

On December 15, 1981, Congress enacted legislation to amend the Federal Water Pollution Control Act. Included among the several provisions of that bill, titled "Municipal Wastewater Treatment Construction Grant Amendments of 1981" (P.L. 91-117), were further modifications to the section 301(h) ocean discharge waiver clause of the law.

Responding to several of the issues raised during the Subcommittee's September 1981 hearing in Los Angeles, the bill's provisions changed or eliminated a number of the requirements that had become stumbling blocks to the waiver provision's implementation. The new amendments eliminated the "existing discharge" requirement, and the Best Practicable Waste Treatment Technology (BPWTT) requirement, as well. Eliminating the BPWTT requirement also removed any remaining uncertainty or ambiguity as to the Congress' intent about the length for which a waiver from the law's secondary treatment requirement would be valid. Communities that were granted waivers and maintained compliance with the statute's other requirements would no longer be required to install BPWTT at a later date.

The 1981 changes also provided specific authority for dischargers already achieving secondary treatment to be eligible, and for a reopening of the application period for one year (to December 29, 1982), so as to enable communities that failed to apply the first time, for whatever reason, to have an additional opportunity to do so.

Finally, the 1981 amendments to the law called for one other change in the overall program that may, in the long run, obivate the need for the waiver provision, if not totally, at least for many communities: it modified the definition of secondary treatment.

Under the new statutory definition, secondary treatment now encompasses a wider range of treatment technologies, many of which are less costly to construct, operate, and maintain. While not capable of consistently meeting the "old" secondary definition, these other treatment techniques, such as oxidation ponds and lagoons, are capable of achieving far more than primary treatment. If applied appropriately, they should also be capable of achieving the law's water quality goals. To the extent that the cost savings are deemed acceptable, even if slightly higher levels of treatment result, some coastal communities may prefer this route to seeking the section 301(h) waiver.

As a result of these changes in the law, and other changes made in the agency's 301(h) regulations stemming from the federal court suits mentioned in the report, the EPA now expects as many as 400 new 301(h) waiver applications to be submitted.

12-957 O - 83 - 4

ADDITIONAL VIEWS OF THE HONORABLE GERALDINE A. FERRARO

Evidence developed by the Public Works Subcommittee on Investigation and Oversight clearly indicates that the Environmental Protection Agency has, in the past, not carried out the will of Congress with respect to the 301(h) waiver provisions of the 1977 Clean Water Act. Congress intended that communities which could meet certain strict environmental criteria should be allowed to discharge sewage without providing full secondary treatment.

In this particular example of an Executive agency going beyond its legitimate rulemaking authority, the EPA excessively restricted the scope of the 301(h) waiver program. The lesson here is not that Congress wishes the EPA to weaken its protection of the environment. Rather, the EPA should implement programs in the manner in which Congress intended them to be implemented.

Nothing in this report should be construed as a signal from Congress that the EPA should treat 301(h) waivers as a loophole for as many communities as the Agency can possibly squeeze through. All too often in recent months, the Agency has been lax in its duty to protect citizens from environmental hazards. A notable example of this laxity was the Agency's lifting of the ban of disposing liquid hazardous wastes in landfills. Congress does not intend for the EPA to administer the 301(h) program in a similar manner.

The Subcommittee has extensively investigated this case study in lawmaking-through-rulemaking. The Subcommittee's efforts will not have been wasted if its work stimulates further Congressional oversight of Congressionally mandated programs. As this case demonstrates, Congress must follow through on its decisions and insure that the actual executions of its programs are faithful to their original intents and purposes.

EXHIBIT 1

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RICHARD J. SULLIVAN, CHIEF COUNSEL
CLYDE E. WOODLE, CHIEF ENGINEER
LARRY REDD, MINORITY COUNSEL

Committee on Public Works and Transportation

U.S. House of Representatives
Room 2165, Rayburn House Office Building
Washington, D.C. 20515
TELEPHONE: AREA CODE 202, 225-4472

B-376 Rayburn Building
Washington, D.C. 20515
October 21, 1981

Mr. Thomas C. ~~Jorling~~
Center for Environmental Studies
Williams College
Box 632
Williamstown, Massachusetts 02167

Dear Tom:

On September 8, 1981, the Subcommittee on Investigations and Oversight held a field hearing in Los Angeles, California, as part of its review of the Clean Water Act's Construction Grants Program. The primary focus of that hearing was the implementation of the 1977 amendment to the law which authorized the U. S. Environmental Protection Agency to grant waivers rom the general requirement that municipalities provide full econdary treatment to communities that discharge to marine waters.

Of particular concern to the Subcommittee was why no application for such a waiver had been acted upon by the EPA since the law was amended. s you may know, the EPA announced its first eight decisions the September 8th Los Angeles hearing, approving five applications.

In discussing the steps that were taken by EPA and state officials to carry out this provision of the law, there was considerable discussion about your role in both shaping the amendment and the EPA regulations that were finally promulgated to implement it. Congressman Levitas, the Subcommittee's chairman, asked me to write to you to advise you of these events, and to provide you an opportunity to comment or respond to the issues and comments that were made during that discussion on September 8th. Should you desire to do so, your response will be made a part of the hearing record at the point at which the discussion took place.

"r. Thomas C. Jorling
tober 21, 1981
.age Two

For your convenience, I have enclosed that portion of the hearing transcript containing the discussion. The opening statements of both the EPA and California State officials are included in order that you may review the discussion in context. I have also enclosed a copy of a letter from you to former Senator Muskie, dated December 7, 1977, and a May 7, 1981, U. S. Court of Appeals decision which struck down certain provisions of the section 301(h) implementing regulations. Both of these documents were central to the September 8th discussion.

In the next several days, both the House and Senate will consider amendments to the Clean Water Law's Construction Grants Program, including some limited amendments to section 301(h) and, in the months ahead, further amendments to the several other provisions of that law will be considered as well. Your views, not only on the merits of the section 301(h) provisions, but on the larger issue of how Congressional intent is interpreted and implemented by federal agencies will be extremely valuable, and I hope you will take the time to review these materials and comment on them in the next few weeks. If you do decide to respond, it will be helpful if you will provide your comments by November 9, 1981.

Best regards.

Very truly yours,

Bob

Robert S. Prolman
Professional Staff Member
Subcommittee on
Investigations and Oversight

RSP/sw
Enclosures

WILLIAMS COLLEGE WILLIAMSTOWN, MASSACHUSETTS 01267

CENTER FOR ENVIRONMENTAL STUDIES

November 3, 1981

The Honorable Elliot H. Levitas
Chairman, Subcommittee on Investigation
and Oversight
Committee on Public Works and Transportation
U.S. House of Representatives
Room 2165, Rayburn House Office Building
Washington, D. C. 20515

NOV 6 1981

Dear Mr. Chairman:

I have received a letter from Mr. Robert S. Prolman of your staff in which he conveyed an opportunity to respond for the record to allegations and comments concerning my management of EPA and specifically the program to implement Section 301(h) of the 1977 Amendments to the Clean Water Act.

I have read the transcript of the hearing Mr. Prolman provided. My reaction has vacillated between humor and anger. Normally, I would ignore these "who struck John" kinds of discussions as not very productive in the public interest.

However, I have read and re-read your comments and attempted to read them in context, giving you the benefit of the doubt. I am, however, unable to reach any other conclusion than the one I have made. Your remarks on p.297 of the transcript - and I quote: "I get the feeling that once Congress--over the bitter objections of the EPA and Mr. Jorling in particular enacted 301(H)--that Mr. Jorling himself and in conspiracy with others set out to defer, deter, interfere, undo, block, the implementation of that provision" constitute an allegation of an impeachable offense on the part of a public official. I held very deeply my sworn obligation to faithfully and fully carry out the law.

Your proceedings were investigation and oversight, the most serious of the proceedings of the House, supposedly not the political fluff one associates with other hearings or press releases on Capitol Hill. I must, therefore, request an opportunity to be heard,

under oath, on these issues and not merely respond in writing for the record. I expect your sense of fairness will extend this opportunity to me.

I'll expect to hear from you shortly.

Sincerely yours,

Thomas C. Jorling

TCJ:pw

Thomas C. Jorling
Director

cc: Congressman Robert Roe

JAMES J. HOWARD, N.J., CHAIRMAN
[illegible]

Committee on Public Works and Transportation

U.S. House of Representatives
Room 2165, Rayburn House Office Building
Washington, D.C. 20515
[illegible]

B-376 Rayburn Building
Washington, D.C. 20515
November 30, 1981

Mr. Thomas C. Jorling
Director
Center for Environmental Studies
Williams College
Williamstown, Massachusetts 01267

Dear Mr. Jorling:

Thank you for your letter of November 3, 1981, advising me of your concerns about the comments made during the Subcommittee's September 8, 1981, hearing on the implementation of Section 301(h) of the Clean Water Act. Indeed, the very reason I had my staff provide you with a copy of that portion of the hearing proceedings was to bring this matter to your attention, and to provide you with an opportunity to respond.

As you requested, I will be pleased to accomodate your preference to respond in person during a future session of the Subcommittee. Either I or my staff will be in touch with you soon as to when this may be scheduled.

With best wishes, I am

Very truly yours,

Elliott H. Levitas
Chairman
Subcommittee on
Investigations and Oversight

EHL/sw

JAMES J. HOWARD, N.J., CHAIRMAN
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Committee on Public Works and Transportation
U.S. House of Representatives
Room 2165, Rayburn House Office Building
Washington, D.C. 20515
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B-376 Rayburn Building
Washington, D. C. 20515
February 3, 1982

Mr. Thomas C. Jorling
Director
Center for Environmental Studies
Williams College
Williamstown, Massachusetts 02167

Dear Mr. Jorling:

I am writing to confirm my staff's phone conversations with you about the Subcommittee's scheduling of a public hearing to provide you with an opportunity to respond to the comments about your role in implementing Section 301(h) of the Clean Water Act that were made during the Subcommittee's September 8, 1981, hearing in Los Angeles, California.

It is planned that the hearing will be held in Room 2167 of the Rayburn Building on Thursday, February 18, 1982, or February 25, 1982, beginning at 10:00 a.m. We will advise you as soon as possible of the exact date.

In accordance with section VII(b) of the "Committee Rules," it is asked that you provide the Subcommittee with a copy of your proposed testimony at least two working days prior to the hearing, and that you be prepared to give an oral summary of that testimony at the time of the hearing. It is also asked that you bring 50 copies of your testimony with you at the time of the hearing for distribution to those present. Also, enclosed is a copy of the "Committee Rules" for your information, as called for by section VII(b)(2) of that document, for witnesses appearing before the Subcommittee.

With best wishes, I am

Very truly yours,

Elliott H. Levitas
Chairman
Subcommittee on
Investigations and Oversight

EHL/amg
Enclosure

EXHIBIT 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

7 DEC 1977 original dated

Honorable Edmund S. Muskie
Chairman, House-Senate Conference Committee on
Amendments to the Federal Water Pollution Control Act
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman and Members of the Conference:

As you know, there were some unfortunate delays in the EPA implementation of important sections of the Federal Water Pollution Control Act Amendments of 1972. To some extent these delays were due to confusion surrounding the interpretation of the complicated new sections added to the law by those amendments. To avoid similar problems in implementing the 1977 amendments, I am taking the liberty of addressing one of the major amendments of the bills before Congress - that covering requirements for municipal outfalls which discharge into deep marine waters - and stating EPA's interpretation of that proposal.

We interpret the provision for modification of secondary treatment requirements for municipal outfalls to limit its application to very special circumstances: those few existing outfalls into very deep waters or very high tide fluctuation areas. Only under these unusual temperature and high energy conditions can conditions exist which allow waters to receive oxygen-demanding wastes without effect on indigenous populations.

In addition, when EPA determines whether modified discharges will interfere with the indigenous population, etc., of an area, we intend to consider the effects of such discharges over the life expectancy of any project that could result from such modification. In other words, our modification decision, even though any modification will be limited to 5 years, would be made on the basis of long-term effects, since such chronic effects are of greatest concern in protecting the integrity of the oceans.

WH-556:TJorling:mh:14 Nov 77

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The Conference's adoption of the proposed definitions and criteria restricts the possibility of modification under this provision to a limited number of areas: California (list enclosed), San Juan, American Somoa, the Virgin Islands, Honolulu, Seattle, and Anchorage. I would note that this listing does not in any way prejudge the question of whether outfalls in these areas would, in fact, qualify under this section.

Adoption of another, broader set of criteria -- which in our opinion the Conferees wisely did not accept -- would prompt many municipalities to seek modification of secondary treatment requirements under this provision simply to delay compliance with the law. This would create an extraordinary drain on Agency resources, and effectively suspend secondary treatment requirements for an indeterminate period. Furthermore, because of our limited understanding of the effects of effluents on oceans, decisions would necessarily be highly judgmental and would, of course, be appealable in the courts. The net effect of this process would be a return to the requirement of proof of harm to receiving waters before controls can be required.

Several additional points should be made with regard to our interpretation of the proposed provisions:

1. Modification of secondary treatment requirements is allowed only where applicable water quality standards exist. We will interpret that language, of course, as applying only to standards for the discharge of conventional pollutants regulated by the secondary treatment definition. We will vigorously apply controls on other pollutants, especially toxics, in these circumstances.

2. Our preliminary review indicates there are few ocean outfalls for which any evidence has been accumulated to support an application for modification of the requirements for secondary treatment with regard to biochemical oxygen demand and total suspended solids. Although there are studies that could have the effect of justifying discharges of a higher level of oxygen-demanding substances, we are suspicious of these studies as they relate to discharges of other pollutants associated with municipal discharges. We interpret the action of the conferees to reemphasize the overall objectives of P.L. 92-500 applicable to municipalities.

3. We intend to apply the requirement that the burden of proof be placed on an applicant to show no interference with indigenous population, and we will assure that the criteria developed under section 403 are satisfied as well.

4. Senate provision (e)(6), which in our opinion the Conferees have wisely retained, ties modification to a requirement that a discharge source has acted to eliminate the entrance of toxics into the municipal system. This will permit the recycling and reclamation of water and the confining and containment of pollutants in the future. We will interpret this provision to require facilities planning during the initial time extension to achieve those objectives.

5. We endorse the concept of limiting any modification to flows existing on the date of issuance of such modification. Only in this way will the municipality be induced to do the type of planning and implementation which will achieve the objectives of P.L. 92-500.

It should be noted, Mr. Chairman, that while much attention has been focused on the dumping of sewage sludge into the oceans, which the Congress has voted to terminate by 1981 (P.L. 95-153), a comparable or more adverse impact on ocean waters is caused by the discharge of sewage effluents into the ocean through outfalls. We know little about the effect of continued release of persistent pollutants to the oceans, but we know that oceans are vital to the biosphere that supports all life. Prudence dictates that we apply controls as rigorously as possible in order to protect the oceans. Therefore, any modification of pollution controls applicable to the oceans occasioned by short term needs should and, as we interpret the conference agreement, is quite limited in scope.

Sincerely yours,

Thomas C. Jorling
Assistant Administrator

Enclosure

EXHIBIT 3

Jim Rogers
RIII 5/11-W

Federal Water Pollution Control Act Amendments
--ACTION MEMORANDUM--

Thomas Jorling
Assistant Administrator for Water and Hazardous Materials WH-556

The Administrator

AX

ISSUE

With the passage of the amendments to the Federal Water Pollution Control Act we now face the immediate and very substantial task of translating the various amendments into guidelines and regulations and incorporating them into our present implementation strategy. In order to get this off and running I have already taken steps to set up an Agency-wide Implementation Task Force. The attached memorandum describes the structure of the Task Force and identifies some of the areas where changes in the Act require an early concentration of resources. One such area is the secondary treatment modifications as they relate to marine water discharge. I anticipate that this provision will cause as much difficulty and controversy in implementation as any of the newly amended provisions.

DISCUSSION

Reasons for this are numerous and include the fact that all applications for modification must be received by the Agency within nine months of enactment. Primarily these applications will be concentrated from POTW's on the West Coast, (Regions IX and X) with some involvement by Region II, relating to Puerto Rico. Coastal communities in other regions may also apply for waivers in an attempt to delay compliance or otherwise take advantage of the modification.

Given the significance of this provision and the need for consistency in the application of the statutory criteria in making decisions on the applications, I am making two recommendations.

RECOMMENDATIONS

First, that a task force be immediately established involving appropriate headquarters people, officials from Regions I, IX, X and perhaps others. The first task (publication date 30-45 days) will be to establish the procedures through which the program will be administered. At a minimum these procedures must avoid the type of complexity that surrounds the 316(a) determinations (Seabrook) and other

adjudicatory nightmares that have arisen under Section 402. Thessecond task would be development of more detailed criteria under the provision. The third task would be as a record compiler and evaluator.

Second, in order to expedite the process (i.e., get behind us the question of compliance with secondary treatment), it is my recommendation that the Administrator delegate the responsibility for making these decisions to the Assistant Administrator for Water and Hazardous Materials with the Assistant Administrator constrained in making any further delegations to Regional Administrators so that only modification for small communities could be delegated to the Regional Administrators. This does not mean that the regions will not be fully invovled. What it does attempt to do is bring these decisions (a) through a process with a single decision-maker to avoid the types of problems experienced in the Seabrook decision and (b) to apply the criteria in a relatively uniform way to avoid inequities between communities and Regions.

If you approve of the above recommended actions I will proceed immediately to set up the task force.

Approve: _____

Disapprove: _____

Date: _____

Prepared by: WH-556:J.Smith:lf:X52916:WJ031:12/20/77

EXHIBIT 4

Preliminary Concepts for Regulating Modifications to Secondary Treatment Requirements for Ocean Outfalls, Per Section 301(h) of the Clean Water Act

by

D. J. Baumgartner

Incorporating material provided by

R. J. Callaway

R. C. Swartz

J. C. Prager

J. Yearsley

R. M. Brice

R. Bastian

and other committee members

January 1978

Waiver

Discussion and Instructions

A. Parameters

- BOD, pH, and SS

1. BOD:

BOD is an important parameter as it relates directly to the oxygen resource of the receiving water. The 5 day measurement of BOD is of historical significance and hence has achieved a note of standardization, but was derived from consideration of travel times of rivers. There is no direct relationship of the 5 day measurement to marine situations. In marine settings there are several time scales of concern, and because time is linked to distance (through current speed and dispersive factors) it is necessary to evaluate the importance of BOD in the marine environment in terms of physically meaningful phenomena associated with outfalls. Under some conditions, BOD may not represent a problem in well flushed coastal regions.

Municipal wastewater discharged into the ocean through submerged outfalls generally creates a buoyant plume that rises quickly toward the surface, entraining significant amounts of ambient water. Dilutions on the order of 100 are achieved within travel distances on the order of 100 feet and time orders of 100 seconds. The momentum of the discharged fluid and the buoyancy relative to sea water are responsible for ~~this~~ mixing ~~which is accomplished~~, although in some circumstances the ambient currents and turbulence contribute to initial dilution in a subordinate amount. The ~~amount of~~ BOD exerted on the oxygen resource in this time period will be significantly less than the 5 day BOD. The appropriate

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quantity in terms of standard methods of analysis will be the immediate oxygen demand (IOD), representing oxidation chemically, and very fast biochemical reactions, in a 15 minute reaction/measurement period. Although 15 minutes is longer than the expected travel (or residence) time in the plume, it will provide a conservative (safe) estimate of initial oxygen demand and is a convenient time period for laboratory analyses. It is important that representative effluent samples be held anaerobically prior to analysis for a ~~time~~ period equal to the travel time through the outfall piping system to adequately reflect increased oxygen debt.

Once initial mixing is accomplished the waste field gradually accomplishes a transition from essentially vertical travel to essentially horizontal travel. This situation is visually depicted for a simple, idealized case in Figure 1.

In the transition zone very little technical information is recorded regarding travel (residence) times and dilution rates. These factors, as well as the physical shape, are highly dependent on ambient currents and turbulence, as will be discussed subsequently. The transition zone is considered to retain diluted wastes for a ~~time period of~~ few minutes to, at most, several hours. The amount of dilution achieved in this zone, for purposes of the analysis, is considered negligible. The applicant must show that the applicable dissolved oxygen criterion and/or BOD criterion will be met at all times and at any place in the transition zone. The 5 day or 20 day BOD or any other time period of reaction may be used as appropriate for this analysis. For example, a 5 day BOD would suffice even though a residence time of 2 hours may be expected, because it would result in a conservative estimate of oxygen demand.

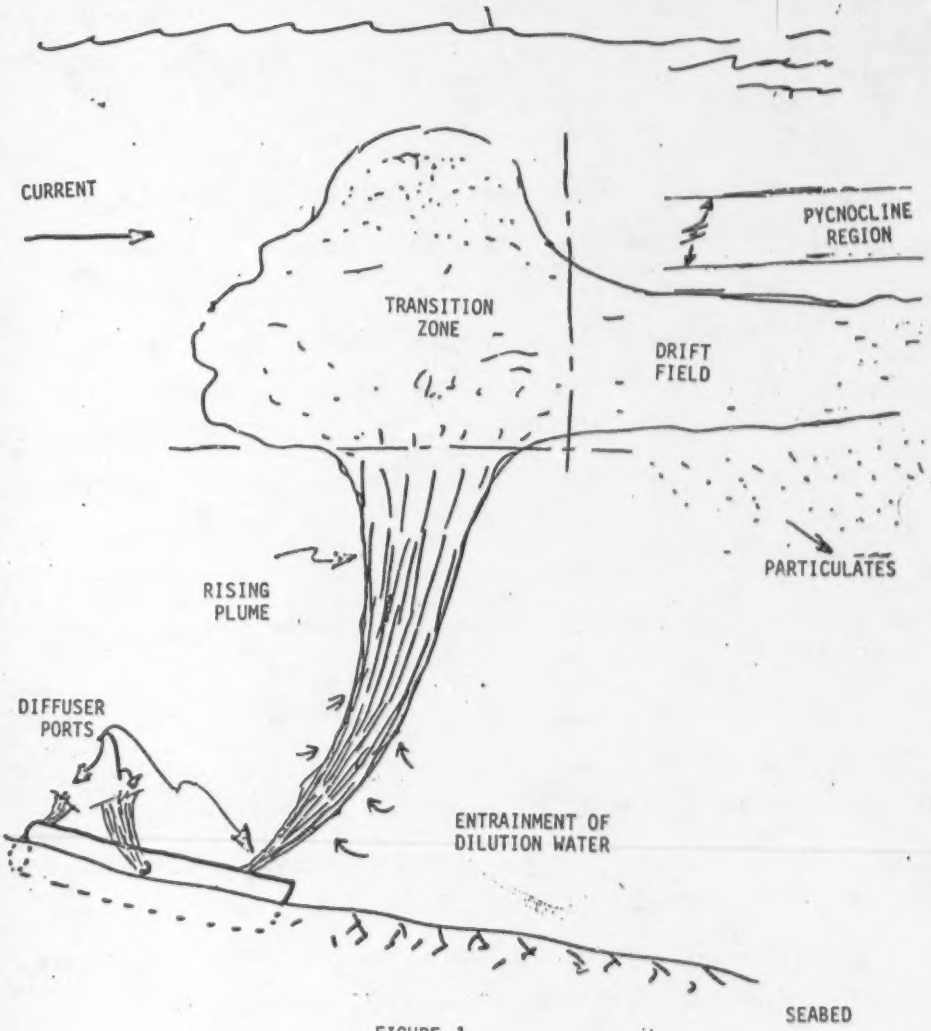

FIGURE 1

WASTE FIELD GENERATED BY SIMPLE OCEAN OUTFALL

The transition zone may be submerged, therefore, to be conservative, the reduction of oxygen demand by atmospheric reaeration should be considered negligible in this analysis.

Following transition, the waste field drifts with the ambient currents and is slowly mixed with ambient water due to ambient turbulence. Generally, drift flows emmanating from outfalls can be identified and traced for ~~time~~ periods ranging from hours to days before pollutants, or added tracers, decay or become diluted to levels difficult to distinguish from background. The degree of dilution may be on the order of 1-10 in this time period while the decay of pollutants is strongly material dependent. Each applicant must show that the BOD (again, measured at the appropriate time scale) will not reduce the oxygen resource in this segment of the flow regime to a level below the DO criterion. Since the drift flow may occur submerged, it is necessary from a conservative viewpoint to neglect atmospheric reaeration.

The fourth flow regime is the general circulation pattern of the region of the outfall beyond the time and space scales associated with discreet plumes and drift flows. No general guidelines can be recited for these situations -- each case will be unique and must be analyzed ad hoc -- but surely time scales of 2 days to several weeks must be considered with respect to the organic and other oxygen demanding materials represented by the BOD measurement and partially removed by conventional secondary treatment.

Unless prescribed by other water quality criteria (to be evaluated subsequently) suspended solids which are allowed to be discharged, pursuant to this regulation, in quantities greater than otherwise would be released,

may settle to the sea bed in the vicinity of the discharge. The oxygen demand of the accumulated sediments must be evaluated to determine if the DO criterion is exceeded in the ambient water near the sea bed. Recognizing that oxygen demand of sediments is an integrated result of highly complex, ~~coupled~~ rate processes, both physical and biochemical, a simplified analysis ~~is requested for~~ representing is required. a critical situation. The critical case is ~~considered to involve~~ envisioned as involving abrupt resuspension of accumulated ~~suspended~~ solids over a 3 month period and subsequent satisfaction of oxygen demand by the oxygen content of a layer of water two meters deep, within a 24 hours adjacent to the sea bed. The ambient DO level and the DO criterion for the critical time of year, if any, should be used for this analysis. The oxygen demand of suspended solids per unit mass of dry material may be determined analytically by total oxidation (admittedly an overestimation) or experimentally. The mass of material accumulated on the sea bed and the areal extent of accumulation can be computed according to a procedure to be described in a subsequent section on suspended solids. The oxygen consumed must not deplete the ambient level below the criterion.

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The experimental determination should be conducted by placing particulate matter on a simulated sea bed, aging for 3 months, and suspending the sediment for 24 hours in sufficient seawater to measure oxygen depletion.

Oxidizable organic and inorganic materials represented in the BOD measurement also represent energy yielding and nutritive materials for marine organisms in the local environment. Under some circumstances the additional biostimulation may result in growth of marine organisms to unacceptable levels. The applicant must demonstrate that any biostimulation effected beyond the zone of initial dilution will not create unsightly

or otherwise aesthetically unpleasant conditions, increases in damages associated with fouling and boring organisms, damages associated with increases in organisms pathogenic to important fish and shellfish. The analysis must relate to local conditions rather than an assessment relative to global oceanic levels of inputs. Arguments purporting to show beneficial effects of biostimulation will have no merit as the evaluation will be concerned only with demonstration of no harm.

2. pH:

The acidity (or alkalinity) of partially treated municipal sewage may influence the pH of marine receiving waters, although in many cases the influence may be of small extent. Since pH is an important parameter of environmental quality with respect to health of marine organisms, the environmental pH caused by less than secondary discharges must be assessed.

Applicants may show data from field measurements in the plume, and in addition, must show laboratory pH measurements from experimental dilutions of effluent with representative ambient sea water. The dilutions to be employed should represent the range of initial dilutions computed for currently representative, as well as expected, flow rates. The data should show the pH immediately after mixing and at sufficient time intervals after mixing to demonstrate that delayed effects, if any, will not be important. The applicable pH criterion must not be exceeded at any time after initial mixing.

3. Suspended Solids:

Suspended solids discharged with partially treated wastes into the marine environment are a cause for concern because of the metals and organic associated with the particulates, moreso than for the direct influence of the particles themselves.

Particulates, per se, may interfere with light penetration due to both scattering and absorbance. In some cases where an extensive field and laboratory data base exists, it may be possible to establish a correlation between interference with light penetration and gravimentric or volumetric measures of suspended solids concentration. Absent this basis the applicant will be required to show with direct evidence that suspended material will not violate applicable water quality criteria for turbidity, light transmission, light penetration, or reduction in photic zone, whichever applies.

Following initial mixing, applicable gravimetric criteria of suspended solids concentrations (i.e., mg/l) may not be exceeded, in addition to other applicable tests.

If applicable water quality criteria limit settleable solids, the applicant must experimentally determine the amount of settleable solids after appropriate initial mixing and a period of quiescent settling. The mass of settleable material may be reported per unit volume of discharge or per unit volume of receiving water, whichever relates most directly to the applicable criterion.

Water quality criteria may limit the actual areal deposition* rate of settleable solids as a way to protect benthic communities from significantly altered sedimentary materials. An assessment needs to be provided in any event, in order to estimate the impact of deposited materials on oxygen levels, as discussed previously. Sedimentation rates in nature are strongly dependent on physical factors which

* As distinguished from a limit on the concentration of settleable solids in the water column.

vary quite widely. It would be difficult to devise an average situation adequately representing ecological concerns and it would be extremely burdensome to conduct a large number of analyses representing all possible cases. Partly for these reasons the applicant is required to conduct two assessments. In one analysis it should be assumed settleable particulates originate at a depth in the water column defined where the buoyant plume first begins to spread horizontally. Quiescent settling rates from laboratory experiments should be used along with mean horizontal translation vectors (zero turbulence), determined from analysis of long term ambient current records representative of the discharge area, to determine a hypothetical areal extent and rate of seabed accumulation of sewage solids. The applicable criterion must not be exceeded.

Aside from consideration of water quality criteria, the applicant must provide an assessment of the long term fate of the sedimentary material. It is important to assure that periodic resuspension or continual drift of sediment loads will not result in deleterious accumulations in bays, estuaries, beaches, and oceanic depressions. Data from seabed drifter studies would be useful in this evaluation.

The most critical evaluation with respect to increased suspended solids discharge will be with respect to possible infringement of applicable criteria for metals and persistent organic compounds (especially synthetic or otherwise exotic forms), and pathogenic or indicator organisms. Unfortunately, these materials are inextricably involved in a consideration of sewage suspended solids, and as a result, every water quality parameter which may be impacted by pollutants sorbed or trapped in particulates must be assessed.

These analyses are with respect to the incremental solids level.

B

4. Applicable Coastal Waters

The amendment and the legislative history identify cities, and sections of open coastline, coastal inlets, and islands where POTW's may be eligible for consideration of a waiver. It is clearly established that depth alone is not a sufficient criterion for effective dispersion and assimilation of waste components traditionally removed by conventional biological secondary treatment. Wastes discharged in deep basins not freely connected to the open sea as, for example, where density stratification and sills restrict replacement of coastal waters by relatively clean ocean water, may result in cumulative effects. Similarly, coastal inlets may result in poor flushing of wastes, even if rapid initial dilution is achieved in a matter of minutes. These situations are depicted schematically in Figure 2. If wastes come to the surface following deep discharge, as they do when density stratification in the ocean is not just right, or as oils always do regardless of stratification, distance offshore may be important. This is because coliforms (and possibly other micro-organisms of direct pathogenic concern) die off in time due to a number of physical/chemical, and biological environmental factors. Time decay mechanisms may be effective in eventually reducing the impact of other waste components (e.g., BOD, nutrients), hence greater distance offshore can be of some value in protecting local beaches. Due to technical and economic considerations, conventional outfalls are seldom far enough offshore to afford protection of beaches from oil and other substances refractive to biochemical decay.

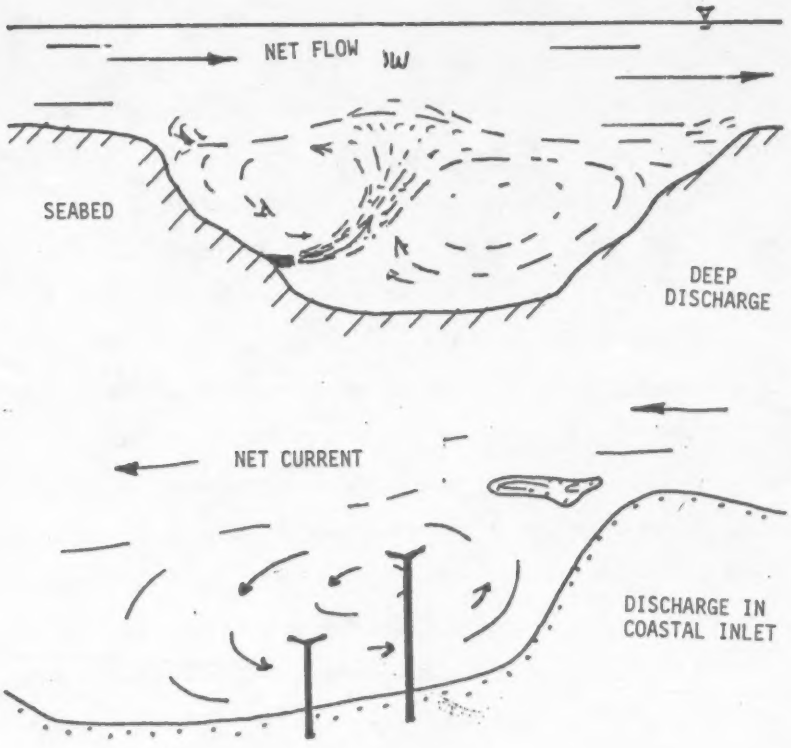

FIGURE 2

EXAMPLE OF OUTFALL LOCATION WHERE FULL ADVANTAGE OF DEPTH AND DISTANCE IS NOT REALIZED DUE TO POOR CIRCULATION

The additional dispersion achieved by turbulence and mixing in the drift flow region is not very great compared to initial plume dispersion and cannot always be relied upon to significantly reduce waste concentrations in the times associated with nearby beach impacts. Coupled with biochemical decay, drift flow dispersion may be effective when coastal currents carry the diluted wastes away from beaches and other nearby sensitive areas. The relative dilution efficiencies (without die-off) are shown in Figure 3 for distances frequently encountered in properly designed open ocean outfalls. These dilutions cannot be realized unless the near shore waters are effectively replenished with clean oceanic water.

Numerical guidance provided in the legislative history as to actual depth considered appropriate is limited to one citation of 200 feet. There is no doubt that this reference is with respect to initial dispersion in the buoyant plume region only, because the example given (45 seconds) cannot be construed as encompassing any other mechanisms. Given that all other factors associated with effective flushing normally occur at the site, 200 feet would be generally expected to provide sufficient depth for a satisfactory design.* Absent these factors, no single depth value can be relied upon. In order to evaluate the overall effectiveness, the applicant will need to supply oceanographic and engineering data in several categories.

1. Initial Dilution

(a) Physical features of the pipeline, diffuser system and outlet ports must be supplied to allow calculation of volumetric flux from each port during a variety of flow conditions.

* This doesn't say a depth less than 200 feet would be unacceptable, but at this point in our deliberations it would be better to be silent.

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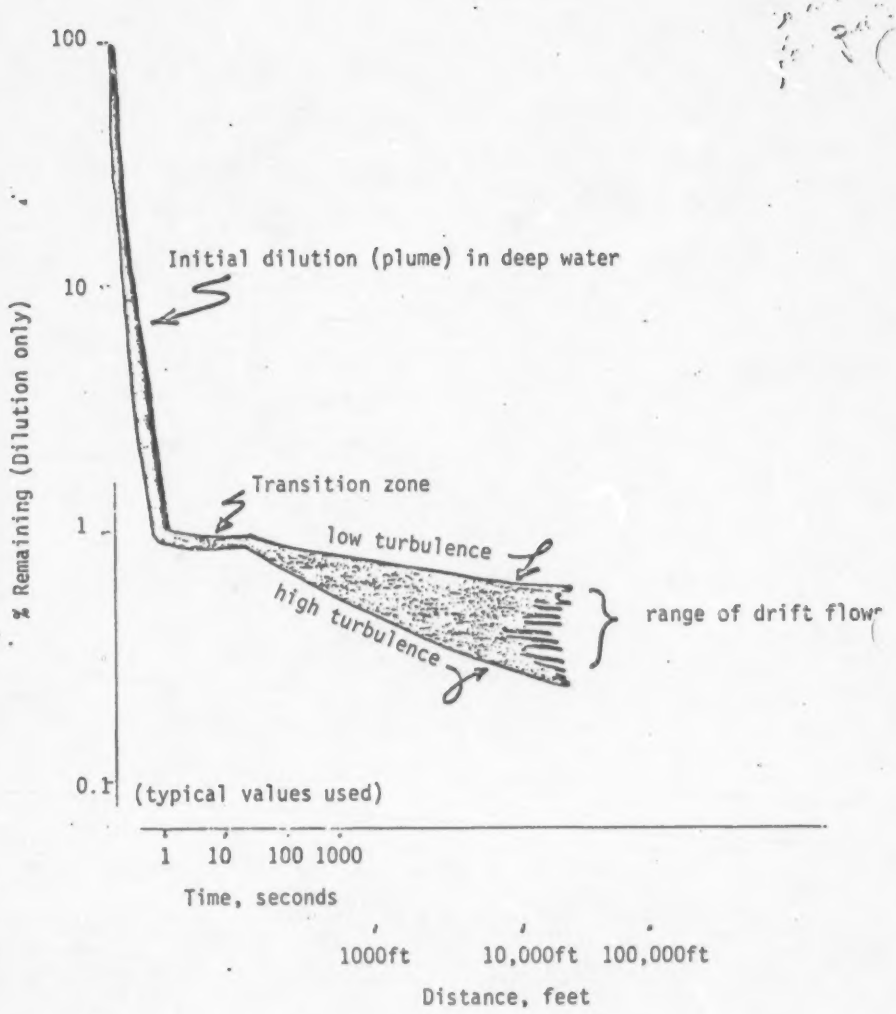

FIGURE 3

RELATIVE EFFICIENCY OF DILUTION IN FLOW REGIMES
ASSOCIATED WITH MUNICIPAL OUTFALLS

(b) Vertical density distribution at the discharge site must be provided so that normalized gradients may be calculated to an accuracy of 5 x 10^{-6} $meters^{-1}$. Field measurements for density should be made at vertical intervals inversely proportional to the gradient.

(c) Initial dilution may be calculated by the applicant, however, this will be calculated by EPA using a simple computer program, PLUME*, based on well known and widely accepted principles of buoyant plume dispersion employed in many mathematical models. A very conservative approach is taken in calculating initial dilution using PLUME and applicants using other models, or other computer programs of essentially the same model, must show by actual comparison of calculations that their results are equally conservative. The main feature of these conservative assumptions is that entrainment is considered to terminate at the depth where the waste first begins to spread laterally. This, in effect, recognizes that there may be times when coastal currents are sufficiently slack to allow a partial build-up of diluted wastes immediately over the outfall. Other models may assume entrainment of clean ocean water to be occurring throughout the transition zone. EPA believes its approach, in addition to being conservative, is more consistent with the theoretical framework of the model.

* "Users Guide and Documentation for Outfall Plume Model," D.J. Baumgartner, D.S. Trent, and K.V. Byram. Working Paper #80, EPA, Pacific Northwest Water Laboratory, May 1971. Available by writing National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22151. (Order Number NTIS-PB 204-557, $3.00.)

The model used by EPA does not account for any increased rate of dilution associated with ambient currents in the region of the discharge. While this results in a more conservative posture, the main motivation in developing the model was one of simplifying the computer program. Consequently, EPA will make an ad hoc adjustment in the dilution calculated by PLUME, based on current vector data supplied by the applicant, to account for increased travel times in plumes advected by ambient currents. EPA may or may not accept applicants' calculations based on other models incorporating advection and diffusion in defining initial dilution. This judgement will depend, in part, on documentation provided and an evaluation of the merits relative to critical (worst case) conditions. It is not envisioned that initial dilution, although important, will bear an overwhelming weight in justifying an exemption.

Calculations using PLUME provide dilution estimates for individual (non-interacting) plumes, primarily for simplicity. In conventional practice multi-port diffusers may result in plumes which overlap (interact) prior to reaching the level of buoyant equilibrium, consequently, EPA will adjust (downward) the estimates of initial dilution, if deemed necessary, to reflect reduced dilution in situations where evidence of interaction appears significant.

For convenience, initial dilutions calculated by PLUME are minimum dilutions expected at any given depth in the plume. Considering the overall plume, these minimum dilutions are expected to be found along the centerline of each plume. For purposes of demonstrating impact on water quality criteria, and for field monitoring, the appropriate value is the average dilution (equal to 1.77 times the centerline dilution) as calculated at the depth where neutral buoyancy is first established, or

in cases where neutral buoyancy is not achieved, the maximum depth over the diffuser. The concentration of waste constituents expected at this level is:

$$CF = CA + \frac{CE - CA}{1.77\ D}$$

where:

CF = final concentration
CE = effluent concentration
CA = ambient concentration
D = centerline dilution calculated by PLUME

The applicant must demonstrate that coastal circulation processes continuously supply dilution water in the amount of 1.77 D x Q, where Q is the volumetric flux of treated wastewater; oceanographic data to be discussed subsequently.

C. Zone of Initial Dilution

Subject to state approval, dischargers exempted from conventional secondary treatment will have to comply with applicable water quality criteria, except within a zone of initial dilution. The zone dedicated to initial dilution must be evaluated with respect to the proportion that this zone represents of the comparable environment in the nearby region, and what natural resource effects inure from this dedication. At stake are both living and non-living resources, and resource components residing or innocently passing through the zone. The potential of the zone to serve as an attractive nuisance should receive a brief review. While an expressed consent may be granted to exceed water quality criteria within this zone, there is no extended license to defile the zone to such an extent that noxious conditions exist within, or danger of harm exists for resources surrounding the zone.

Subject to evaluation of resource impacts, EPA believes that the zone dedicated to initial mixing should be as small as possible and ~~consistent with accuracy of position location expected in oceanographic field monitoring~~. Conceptually, it is intended that the zone occupy only the space swept by the rising plumes emanating from the diffusers; for operational convenience, a more conventionally shaped volume encompassing the plumes may be accepted. The instantaneous shape of this zone may change from hour to hour depending on oceanographic factors and flow conditions, therefore it would be possible to delineate one or more zones depending on seasons or other critical considerations. An example of a zone delineated for a typical ocean outfall is depicted in plan and profile in Figure 5.4.

3. Effective Coastal Circulation

Several factors exist in coastal waters that must be considered in the evaluation of the waiver request.

Wind stress is the dominant driving force and exceeds the longshore pressure gradient due to the shallowness of the area. Longshore momentum is concentrated in the upper layer due to stratification of the water column.

Upwelling may play an important role in supplying nutrients. Onshore/offshore flow may result as an effect of tides, runoff, and winds.

Currents generally parallel the coast in the coastal boundary layer; further offshore oscillating and random current patterns may exist.

In areas such as the southeast coast, influence of the Gulf Stream will be felt and may also cause local eddies and current reverses to occur.

Seasonal measurements of current speed and direction, and salinity shall be made in continuous profile (where possible) in transects from the shore to at least one pipeline length greater than the outfall

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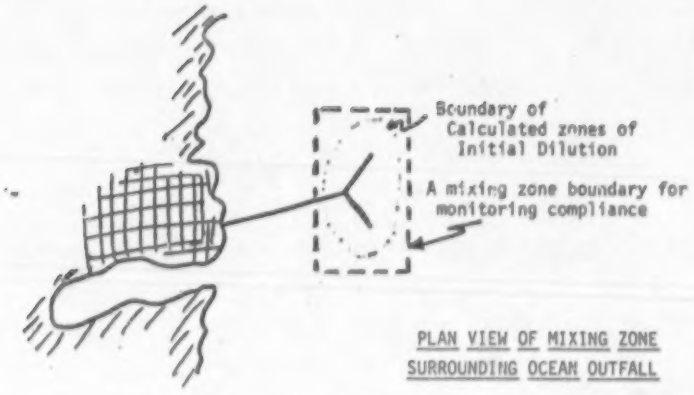
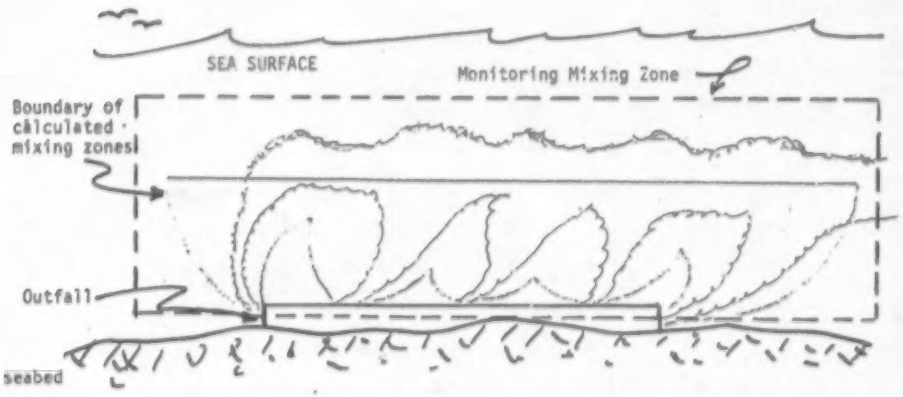


PLAN VIEW OF MIXING ZONE
SURROUNDING OCEAN OUTFALL



ELEVATION VIEW OF MIXING ZONE
SURROUNDING OCEAN OUTFALL

FIGURE 4

distance offshore. Station spacing will be in distances of one-fourth the pipeline length. Similarly, data at two stations on each side of the diffuser will be provided.

Depending on the specifications of applicable water quality criteria and monitoring requirements (subsequently described), additional measurements should be made simultaneously at the same stations. Light transmission, pH, dissolved oxygen and suspended solids measurements are possible minimum requirements.

Continuous wind data representative of the outfall area (away from buildings and topographic effects) and for sufficient time in the recent past needs to be provided.

Correlation of current speed and direction with wind speed and direction, and where possible, cross-spectral analysis should be provided. Current meter records must also be examined for onshore/offshore components, frequency, and other statistical properties.

Continuous records of current speed and direction at two depths near the diffuser will be provided.

Effects of direct freshwater runoff from coastal areas will be determined, as will any effects of estuarine discharges.

Estuarine Areas

In the previous sections it is established that coastal communities applying for an exemption must be able to demonstrate effective net flushing. Conceivably, this condition might be represented visually by a demarcation line on a coastal chart for a section of coastline, such as for point A on Figure 5. Having established that poor flushing inland of this hypothetical line would preclude granting a waiver, it is necessary for the sake of consistency to extend the demarcation line

around the mouths of most estuaries, as for example, at point B in Figure 5. Otherwise, discharges from coastal communities might be carried far inland on flooding estuarine tides and may be only partially removed on subsequent ebb tides.

Clearly, this is not likely to result in improved water quality in estuaries and should be avoided. If it were to be allowed, then it would be difficult to exclude almost any coastal discharge on the basis of comparable criteria of flushing. Almost any coastal discharger should be able to demonstrate less retention of effluents than even the best qualified estuarine city. Nevertheless, there may be some dischargers on coastal inlets (whether or not they are strictly estuarine or inside the territorial sea baseline) where net flushing is highly effective and pollution retention is not expected to be a problem. In these situations, there may be justifiable reason to relax a depth or distance criterion drawn with respect to a baseline (point C on Figure 5).

Neither tidal heights nor tidal currents alone can be relied on to guarantee either net effective flushing or prevention of adverse effects. Strong tidal currents may contribute to vertical and horizontal mixing in the estuary, but may not be the most significant factor in preventing water quality problems. It should be appreciated that tidal currents work both ways, and consequently, flood tides may transport wastes further inland from the discharge site. Of particular concern is the potential for suspended materials to accumulate on upstream tide flats at slack tide following the flood tide.

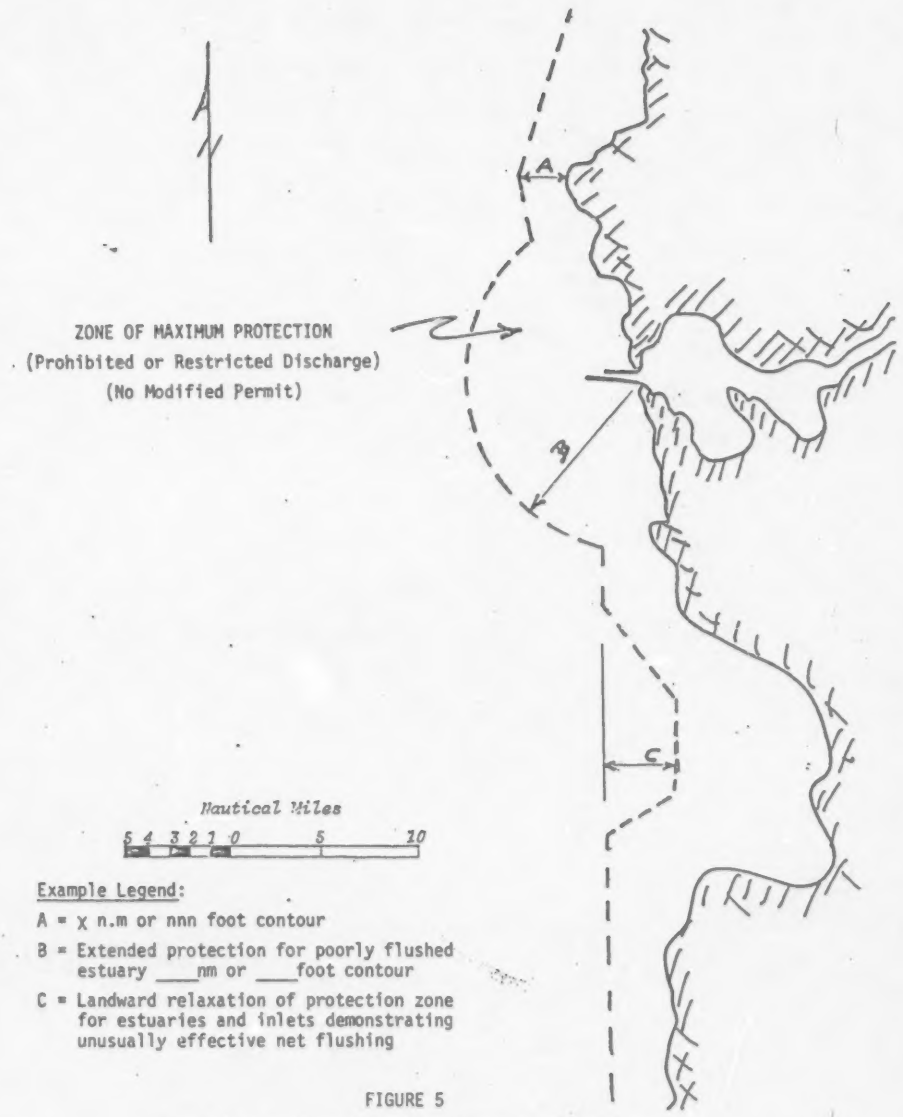

ZONE OF MAXIMUM PROTECTION
(Prohibited or Restricted Discharge)
(No Modified Permit)
A
B
C
Nautical Miles
5 4 3 2 1 0 5 10
Example Legend:
A = χ n.m or nnn foot contour
B = Extended protection for poorly flushed estuary ____nm or ____foot contour
C = Landward relaxation of protection zone for estuaries and inlets demonstrating unusually effective net flushing

FIGURE 5

A possible working classification of marine waters where temporary exemptions from secondary treatment will be considered.

"Strong tidal currents" in an estuary don't necessarily mean good flushing. Flushing depends on proximity to the entrance, tidal prism, freshwater inflow, etc. Conversely, a high Q in combination with topography, etc., can result in a net upstream movement along the bottom. Where models exist (hydraulic or math), applicants should use them for predictive purposes. Examples are the math models, the COE hydraulic model of San Francisco, and the hydraulic model of Puget Sound. Depending on the volume of flow considered, it might be a requirement to apply a math model to a given system. If it is used as primarily a dilution calculation and not a research tool, then it could at least provide some assurance that the regulations were being met.

Initial dilution calculations are more difficult to evaluate in estuaries, if for no other reason than the fact that models were developed with deep ocean waters in mind. Estuaries are generally shallower and

tidal currents may play a significantly more important role in influencing the shape of plumes, as well as the trajectory and dilution rates. Discharges into deep basins of estuaries may result in initial dilutions comparable to the open ocean situation, however, other features of estuarine circulation may be the controlling factors in realizing effective dilution. In demonstrating the merits of each case, applicants will be required to provide the following information at a minimum.

Seasonal classification of the estuary in the vicinity of the discharge must be documented in relation to the scheme devised by Hansen and Rattray*. This will aid in evaluating the relative effects of density stratification, and the relative importance of surface velocity to river runoff, as an index of flushing rate.

The freshwater budget of the system must be documented as to the cumulative effect of runoff at the point(s) under consideration in conjunction with the above requirement.

Wind and tide effects must be considered in conjunction with an attempt to determine influence of different tidal (and wind) conditions on stratification-circulation. use flush instead.

An evaluation of lateral effects contribution to longitudinal motion shall be made. Examples where these effects have been shown are the Vellar, Mersey, Gironde, and Chesapeake estuaries.

Geometric effects on spatial and temporal variations shall be evaluated with narrows and shoaling effects in mind.

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* "New Dimensions in Estuary Classification." D.V. Hansen and M. Rattray, Jr., Limnology and Oceanography, 11, (3), 319-326, 1966.

Spatial and temporal scale-dependent phenomena within the outfall tidal excursion zone are to be evaluated. This refers to near-source effects where constant coefficient approximations do not apply. This sort of complexity is indicated by dye diffusion tests (and would require their use).

If numerical models are used to support the waiver request, complete documentation and seasonal verification at the point(s) in question will be required, as will methods employed to evaluate turbulent, advective, and source-sink terms.

If hydraulic models are used to support the waiver request, time-lapse photographs covering combinations of seasonal runoff and tidal conditions at the point(s) in question will be required. Documentation of methods employed to simulate wind, density, and velocity profiles will be required.

Background data on suspended solid contributions and estimates of deposition and resuspension to the estuary solids balance must be supplied.

C. Marine Biological Assessment

Section 44(h)(2) of the Clean Water Act of 1977 requires that modification of the secondary treatment requirement will not threaten the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife. The Environmental Protection Agency's evaluation of applications for exemption from this requirement will be based on an analysis of the existing condition and vulnerability of marine biological communities likely to be impacted by partially treated effluents. The extent of the required documentation is dependent on two factors: the quantity of effluent to be discharged and the relative sensitivity of the receiving ecosystem.

All applicants must provide a qualitative summary of biological conditions in the vicinity of the outfall. This report will discuss:

1. the presence, characteristics, and distribution of biological communities including demersal and pelagic fishes, macrofaunal benthos, phytoplankton, zooplankton, macroalgae, and intertidal assemblages;
2. the identity and relative abundance of the dominant species in each community;
3. the presence or potential for commercial or recreational fisheries;
4. the presence of distinctive habitats of limited distribution such as kelp beds, coral reefs, sub- or intertidal rock outcroppings, etc.;
5. the extent to which the outfall discharge has (or will) cause alterations in the natural structure and function of biological communities or reproductive potential of populations. This must include changes in species composition, standing crop,

diversity, and disease incidence.

The biological conditions summary should be based on existing data, if available, or qualitative biological sampling. For outfalls with relatively low effluent flow rates, this summary may contain all of the biological data necessary to support the modification application, provided there is no evidence of a threat to the balanced, indigenous populations. If there is evidence of the possibility of an ecologically significant impact or if the flow rate exceeds 2 mgd, this summary will serve as a guide to the design of the more comprehensive, quantitative biological analysis described below.

Field Surveys

Biological field surveys will provide quantitative descriptions of the structure of all communities likely to be affected by the outfall effluents. The macrofaunal benthos is recommended as an appropriate indicator assemblage for the effects of settleable effluent components. The design of the sampling program must include control stations against which the effects of existing or future outfalls can be gauged and sufficient stations should be occupied on a radial pattern of transects so that gradients of conditions may be observed. Natural variability in community structure must be analyzed before pollution effects can be detected. Seasonal and annual temporal patterns of structural parameters must be examined. These parameters shall include species composition, density, biomass, dominance and richness. The presence of indicator species known to be tolerant or intolerant of marine pollution should be emphasized. The data sets should also be analyzed for changes in the disease incidence and size frequency distribution of commercial species. Sampling guidelines for the benthos, phytoplankton, zooplankton, demersal fishes, and intertidal

communities are available. Spatial-temporal heterogeneity in community structure can be analyzed by the numerical classification techniques reviewed by Boesch (1977, EPA Ecol. Res. Ser., 600/3-77-033).

If statistically significant differences in biological conditions at the control and outfall collection sites are not found, the adequacy of the sampling design must be evaluated in terms of its ability to detect biotic alteration. If statistical differences are found, an assessment must be made of their ecological significance. Degradation of biological conditions in the initial dilution zone of the outfall will generally not prevent approval of the application. However, applications s will be denied if there is evidence of temporal or large-scale spatial trends toward deleterious changes in marine resources.

D. Monitoring

Section 44(h)(3) of the Clean Water Act of 1977 requires that applicants must establish a monitoring system to determine the impact of the discharge on representative biota, to the extent practicable. For outfalls with low flow rates or those which are highly unlikely to result in a threat to balanced, indigenous populations, monitoring may not be necessary or may be restricted to qualitative sampling of indicator assemblages such as the macro benthos, or sampling of physical and chemical parameters only. Monitoring for all other discharges must be more comprehensive. It should be based on possible ecological effects identified in the field surveys and data analyses presented in the application for waiver. Quantitative biological monitoring would seem to be necessary initially in only a few marginal cases or very large discharges. However, periodic assessment of monitoring results may demonstrate the need for improved monitoring. The discharger is responsibl

for exercising this vigilance, as negligence on his part may be cause for permit revocation when monitoring results are reviewed by EPA.

The monitoring design should be responsive to environmental concerns evaluated in the application: water quality criteria, initial dilution calculations, effective net flushing, and all other water quality parameters and structural parameters associated with the health of marine biological communities. Sampling should be conducted at quarterly intervals for at least the first three years. The requirements for intervals of sampling and the parameters measured may be relaxed after three years.

Sampling and measurement methods should be conducted according to standard methods.*

An adequate pH meter and electrodes should be calibrated with respect to pH 7 and checked at pH 4 and pH 10, insuring before each use that the meter is working properly.

We believe an in situ type instrument for pH measurement is the best if costs permit. It is accurate and saves a great deal of time. Furthermore, it removes one of the great variables in measurements of this type, namely handling of the sample.

It is possible that pH indicator papers or pH indicator solutions might serve the purpose, although there are serious reservations. These materials are available in a wide range of pH values, and the specific pH being observed is indicated by matching colors or by a specified color.

*e.g., (1) Standard Methods for the Examination of Water & Wastewater, 14th Ed. (15th)

(2) "A Practical Handbook of Seawater Analysis" (J.D. Strickland and J.R. Parsons), Fisheries Research Board of Canada, Ottawa (1968).

These methods would clearly be less satisfactory than a pH meter if adequately trained technicians are available. They are simple and if this is the controlling criterion, they may be considered.

Light transmission will be measured by standard-beam transmissiometer or nephelometers. Path length will be determined by local conditions and is expected to vary from 10 cm. to 1 meter or greater. Simultaneous measurements of suspended solids, if required by applicable criteria, should include gravimetric and volumetric parameters so that correlations with water clarity measurements can be made.

EPA may require specific monitoring requirements expected to yield scientific data to further the aims of the Water Pollution Control Act. These requirements will take into account other monitoring programs, with a view toward a unified overall program, and may result in reduced requirements for some parameters or other trade-offs. As this will be an evolving process, specific requirements cannot be delineated in advance.

Monitoring Program

Those cities which qualify for a waiver of the secondary treatment requirements under Section 301(h) of the Federal Water Pollution Control Act, as amended, must establish a monitoring system. The legislative history, associated with the amendments to the Act, indicates that the monitoring program should have two objectives. The first objective is to monitor the water quality of the receiving waters, ensuring that applicable State water quality standards are not violated. The second objective of the monitoring program is to provide data for evaluating the impact of the discharge upon indigenous populations. This aspect of the program would be used not only for assessing the efficacy of the waiver, but could also be used as a means of determining, at the end of each five year period, whether or not the waiver should be extended.

The waiver permits modifications only to those parameters specifically included in the definition of secondary treatment under the existing law. Those parameters include biological oxygen demand (BOD), pH and suspended solids. The monitoring program, therefore, should be designed to evaluate the impact of these parameters upon applicable water quality standards and to assure "... protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water."

While the waiver is intended for those cities which discharge primarily domestic waste to marine waters, the legislative history does acknowledge that some municipal systems will have industrial wastes. Section 301(h)(5) requires that pretreatment requirements for these dischargers be enforced. Despite this provision, cities which contain

industrial dischargers should have more stringent monitoring requirements. Particular attention should be given to those pollutants, associated with the industrial discharges, which are toxic.

Effluent

Monitoring of the effluent provides data for establishing causal relations between the treatment plant discharger and observed violations of water quality criteria, and impacts upon indigenous populations. In addition, effluent monitoring is essential for ensuring compliance with Section 301(h)(7), relating to no substantial increase in the volume of the discharge.

General monitoring requirements include definitions of the mass emission rates of immediate oxygen demand, ultimate carbonaceous oxygen demand, ammonia and suspended solids. These definitions should include measures of their mass emission rates in the frequency domain, for periods of 24 hours to one year. The critical weekly, monthly and annual cycles can then be identified. A similar sampling regimen should be established for pH.

Parameters which are not specifically included in the definition of secondary treatment, but which may have direct bearing upon the waiver, or for which the specific parameters may be surrogates, include temperature, bacteria, conductivity, chlorine demand, turbidity and toxicity. With the exception of toxicity, the recipient of a waiver should establish a program to monitor these parameters such that critical daily, weekly, monthly, and annual cycles can be described.

The toxicity monitoring requirements for cities receiving domestic and industrial wastes should be more stringent than for those cities receiving domestic wastes only. This is not, however, intended to indicate a lack of concern for those cities which have essentially

domestic wastes. Monitoring requirements for both types of facilities should include chemical analysis for the toxics mentioned in the , as well as a bioassay program. The cost of these programs indicates against high frequency (greater than once every two weeks) measurements. The frequency of measurement and, in the case of the bioassay, the type of measurement, should be determined by the nature and volume of the waste. In some cases, previous studies will be useful for designing the measurement program. Where data are not available an intensive pilot program, lasting at least one year, may be necessary. As much as is practicable, the toxicity monitoring program for the effluent should describe critical events, as well as long term loadings.

Receiving Waters

The monitoring program for the receiving waters must deal with the immediate impact of the waste upon water quality, as well as providing an indication of long term effects. Impacts are to be measured at the mixing zone boundaries described in the permit of the successful waiver applicant. The choice of a control site is important from the viewpoint of both short and long term effects. Furthermore, it is important to characterize the quality of coastal or estuarine waters which is providing the diluent for the waste discharge. It is likely that the requirements of the waiver application will provide the basis for the choice of control stations. If this information is not available, however, a hydrographic program to describe background water quality conditions, as well as to define critical water quality periods, may be required of the applicant. Normally, such a program would be conducted in the vicinity of the discharge, for the period of one year.

Due to the natural variability of oceanic and estuarine waters, it is difficult to identify short term differences in water quality between

the mixing zone boundaries and the control station without intensive, synoptic surveys. Similarly, the establishment of long term trends requires a long time series of unaliased data. These requirements may exceed the data needs for certain small, isolated communities. Acceptable methods for screening such situations would include mass balance analysis, used in conjunction with reconnaisance water quality data.

Those dischargers for which the screening tests indicate a need for a comprehensive water quality monitoring program should make use of proven methods to design the monitoring network. Prevous experiments and judgements of local scientist may be adequate in some instances. In those cases where monitoring costs will be high, it may be necessary to develop horizontal spatial and temporal sampling networks based upon spectral analysis of available time series and other statistical models, such as optimal filters. In all cases, the resulting monitoring program should be designed such that impacts of the discharge can be separated from impacts due to tidal, meteorological and diurnal (solar) driving forces. The location of sampling points should also be designed such that impacts of the discharge at all those time scales described in the waiver application form can be monitored.

Roughly speaking, one can identify three levels of water measurements. At the first level are those water quality parameters which should be included in all surveys. These are temperature, salinity (conductivity), dissolved oxygen, pH, water clarity (transmissivity). Oceanographic equipment is available to monitor these parameters continuously from surface to bottom. If instrumentation of this nature is not available, or not required in the survey design, water samples taken at standard

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oceanographic depths can be used for these observations. Secchi disk readings are a satisfactory and economical means of measuring average transmissivity of light in the photic zone. This measurement does not, however, provide information on the depth-dependence of light transmission.

The measurement of BOD, suspended solids, various forms of inorganic nitrogen and inorganic phosphorus are one degree of measuring difficulty and, therefore, one degree of cost, greater than the measurement of temperature, dissolved oxygen conductivity and light transmissivity. If there are water quality standards for BOD and suspended solids, or if oxygen demand associated with excess enrichment is important, it will be necessary to include some or all of these second level parameters. The nature and volume of the waste, as well as the character of the receiving water should provide the basis for the determination.

For short term monitoring, field studies which include one or both of these levels should provide hourly measurements for 48 or more hours at mixing zone boundaries and at the control site. These intensive surveys need to be done only at those times of the year which have been defined to be critical in some sense. Critical times would include but not be restricted to periods of high loadings from the treatment facility, periods of low background water quality and periods of low net circulation.

For long term monitoring, twice a month may be a sufficient sampling period if a representative location can be found for the parameter in question, which is not affected by high frequency phenomena, such as surface heating and photosynthesis. Finding such a location requires some knowledge of the spectrum for the parameter being considered.

The third level of difficulty is the measurement of toxic constituents in marine waters. It is likely that such measurements would be made at

the mixing zone edge and control site not more often than four times a year and only for discharges with industrial components.

Measurements of biological indicators in the receiving water have proven useful for measuring the impacts of waste discharge, both short and long term. As in the case of BOD, suspended solids, and toxics, these measurements are for the most part costly. Due to the variability of natural systems, results from intensive measurements of this nature would not be useful for any but the largest of discharges, or for water bodies which were considered to be of marginal quality.

The types of biological measurements which are included in this category are primary productivity, descriptions of algal populations and algal succession, quantitative descriptions of plankton and nekton populations, transfer of energy between trophic levels and transfer of organic and inorganic pollutants between trophic levels. Careful review and analysis of the type and quantity of discharge, with particular attention given to combined municipal/industrial discharges, should be performed before a monitoring program of this nature is prescribed.

The receiving water monitoring program must be coordinated with the effluent monitoring program. This is most important for establishing cause and effect relationships between the waste discharge and water quality impacts observed at the mixing zone boundary. As the time and length scales of the impacts increase, the importance of high frequency characteristics in the waste discharge decreases.

In the design of the monitoring program for those dischargers receiving waivers, recognition should be made of previous monitoring programs. If, for example, sufficient data exist at mixing zone boundaries

to develop statistical or mass balance models relating to waste discharge and water quality, then the monitoring program should be designed to reflect this. It is incumbent upon the discharger to provide periodic review of such models to assure their validity.

Benthic Sediments

Benthic and intertidal sediments provide a direct and generally stable medium for assessing the impact of discharges upon balanced indigenous species. That fraction of suspended solids in the discharge which settles out, or the metabolites, related to the BOD, which settle out, can have a substantial impact on benthic and benthic-dependent organisms. These impacts can result from physical factors, such as smothering and change in substrate and habitat, or from chemical factors, such as toxicity and increased oxygen demand.

Chemical and biological surveys of the benthic and intertidal environments are expensive and time-consuming. Despite the relative stability of benthic ecosystems, interpretation of survey results often suffer from the same ambiguity that other geophysical and geochemical experiments do. Design of the appropriate monitoring program should, therefore, be based upon the nature of the waste and the character of the receiving waters. Guidance for the benthic monitoring program design can be obtained from previous studies, when available. Sedimentation rates, as estimated in the waiver application, can also be used to develop a screening method for determining the scope of the benthic monitoring program.

Reconnaissance, or qualitative surveys of the structure of the benthic community are also useful in design of the program. For small discharges to very high quality marine waters, such qualitative biological

surveys may suffer for the monitoring program. Certain monitoring requirements may be preempted by other laws. For example, those cities with industrial wastes may be required to do chemical analysis of the sediments, shellfish and finfish to comply with the Toxic Substance Control Act.

Those programs for which quantitative chemical measurements are required should conduct surveys no more freqoently than every three months. Transits through the mixing zone region should extend to the limits of estimated impact of the outfall. Sediment analysis should include grain size analysis, sediment composition, chemical analysis for the seven EPA (Jellinek) constituents, and the 65 (129?) toxics, if there are industrial sources. At the highest level of monitoring, radioactive dating methods can be used to obtain quantitative measures of sediment accumulation rates.

Quantitative programs for biological monitoring programs, when required, might include:

1. Measures of species diversity and number of individuals
2. Quantity and character of dominant organisms
3. Quantity and character of indicator organisms
4. Measure of uptake rates of toxics by molluscs, macroalgae, and bottom feeding finfish
5. Measures of disease incidence such as finrot, tumors and liver disorders in bottom feeding fish

Bioassay methods, designed for ocean discharge evaluation may also, in some cases, prove to be useful.

Benthic monitoring, as well as effluent and receiving water programs, should be subject to review. Costly programs need not be continued indefinitely if results indicate little impact on the environment. Conversely, those programs which are critically low key should have a mechanism for reviewing and analyzing the survey results. If the review process indicates a need for increased monitoring, the monitoring program should be flexible enough to incorporate needed change.

EXHIBIT 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 01 1978

OFFICE OF
GENERAL COUNSEL

MEMORANDUM

TO: Thomas C. Jorling
Assistant Administrator
for Water & Hazardous Materials (WH-556)

FROM: Section 301(h) Task Force

SUBJECT: Agenda for March 2, 1978 Meeting on 301(h) Regulations

We would like to cover the following matters at our March 2, 1978 meeting on the development of regulations implementing Section 301(h).

I. We need your comments on the rough draft of the regulation (plus preamble and application form) which we sent you a week ago.

II. We need to resolve the following issues:

A. Whether a 301(h) modification may be granted for a discharge into the contiguous zone (the problem is an inconsistency on the face of the statute -- the requirement that there be a state water quality standard in Section 301(h)(1) vs. the reference to "contiguous zone" in the statutory definition of "discharge into marine waters").

OPTIONS:

1. No modification may be granted for a discharge into the contiguous zone.

PROS: This is a simple bright line test which would automatically eliminate a number of California outfalls (including City of Los Angeles).

CONS: We would be sued by those California municipalities which have contiguous zone discharges. Furthermore, we would probably lose since our construction of the statute is not a reasonable resolution of the conflicts on the face of the statute, given the purpose of and scientific basis for Section 301(h).

2. Modifications may be granted if the discharger meets state water quality standards for the territorial seas nearest the discharge.

PROS: For the reasons stated above, this is probably the only reasonable (and therefore judicially sustainable) interpretation of Section 301(h).

CONS: This gives us one less bright line test for Southern California municipalities.

B. What constitutes an "existing discharge"?

OPTIONS:

1. The applicant's discharge as of December 27, 1977 -- i.e., no changes may be made in the nature of treatment, location of the discharge, nature of the diffuser, etc.

PROS: This serves as a very neat bright line test for a large number of municipalities. For example, a number of California municipalities currently cannot even meet the revised California ocean plan without extending their outfalls and/or upgrading treatment. There is some support for this position in the legislative history; as Senator Muskie stated during debates on the conference bill, 301(h) is premised on hearing testimony by coastal municipal dischargers that "they have accumulated sufficient evidence to prove no adverse effect on water quality and aquatic ecosystems from such discharges."

CONS: This test may cut out many small domestic dischargers (such as the Pacific Islands) which will have to relocate their outfalls or upgrade treatment in order to qualify for the modification. Also, our interpretation of the provision would be subject to legal challenge since arguably the "evidence" collected by coastal communities could include evidence on which a predictive judgment of the impact of a modified discharge could be made. Some communities have already made this argument to us.

2. Allow limited modifications of the discharge (e.g., no shifting from one body of marine water to another, as Boston is contemplating), but require that such modifications be made by a time certain and state in the preamble that applicants seeking a modification based on a modified discharge containing toxics will bear an extremely heavy burden of proving that an accurate predictive assessment of the effect of their modified discharge can be made and will be subject to revocation of their modification if (1) the modifications are not completed within the time specified in the permit or (2) their predictive judgments prove to be incorrect.

PROS: This would allow us to grant modifications for small dischargers of essentially domestic wastes who will have to modify their discharge (e.g., moving it from a lagoon to deeper waters) in order to qualify for a modification. This approach is also probably a more reasonable interpretation of the statute.

CONS: We lose a major bright line test. We will have to figure out what is a reasonable time for completing any necessary modifications (e.g., as soon as possible but not later than time for meeting secondary treatment requirements in an ECSL or 301(i) extension). We will have to determine whether the applicant should be permitted to factor in pretreatment standards which may be in effect at the time the modification is required to be completed. It will be difficult to make predictions as to the effect of non-existent discharges (of course, we could simply deny applications in these instances). Dischargers will tend to exaggerate the degree of toxic removal which can be obtained with upgraded systems and underplay environmental impact. Inevitably, dischargers will not make the modifications on time, and we will find ourselves with a major compliance problem (or, alternatively, we could take a tough approach and revoke the modified permit). Finally, allowing the submission of applications for a modified discharge might weaken our no-retreat-from secondary position.

C. Whether applicants should be required to have all application information in by September 24, 1978.

OPTIONS:

1. We can take a hard line approach that the application must be complete as of September 24, 1978.

PROS: This would function as a bright line test, since some municipalities won't be able to make the September 24, 1978 date. There is support for this approach in Muskie's statement on the conference bill and in other statements during both Senate and House debates that modification decisions must be made expeditiously.

CONS: Some dischargers have already told us that they will not be able to put together the necessary information by September 24, 1978. The deadline may pose a problem for some of the small dischargers of essentially domestic wastes who should ideally be granted the modification (however, this hurdle could probably be overcome by providing regional technical assistance for these applicants). If there is any major delay in proposing/promulgating our Section 301(h) regulations, municipalities will claim that their inability to meet the September 24, 1978 deadline is in part attributable to EPA; a court might be receptive to that kind of equitable argument. There is also the possibility that a court might interpret the 270-day deadline as requiring only that a request (as opposed to a completed application) for modification be submitted by September 24, 1978; I think we would have a pretty good shot at beating this kind of argument based on the legislative history of Section 301(h).

2. We can extend the September 24, 1978 deadline for a limited period (e.g., two months).

PROS: This might give some of the small dischargers a better shot at putting together the information necessary to qualify for a modification.

CONS: As a practical matter, a short extension will probably not be very meaningful to the applicants and they will insist on a longer extension -- e.g., six months. Furthermore, once we relent on a firm September 24, 1978 deadline, we may have some difficulty in justifying denials of individual requests for extensions (which we perceive to be virtually inevitable in any event).

D. Whether we will consider changes in State water quality standards made after September 24, 1978?

OPTIONS:

1. No.

PROS: This is consistent with our position that an application must be complete upon submission. It will also give States less time to fiddle around with their water quality standards (as California is doing) in order to facilitate the granting of Section 301(h) modifications to dischargers in their state.

CONS: The argument will be made that we should consider changes in State water quality standards made by the state and/or approved by EPA made prior to a final decision on an application for modification.

2. Yes.

PROS: None.

CONS: This may encourage applicants to draw out the decision process, so that revised standards can be promulgated/approved prior to a decision. Additionally, since the secondary treatment modification is a one-shot deal, this means that the speed with which EPA acts (or doesn't act) on a particular application may, as a practical matter, determine whether a modification is granted; there are, therefore, likely to be serious equitable problems if we adopt this approach.

E. Whether we should single out small dischargers of essentially domestic wastes for special treatment?

OPTIONS:

1. Yes, by automatically granting them a modification (i.e., the Jack Rhett approach).

PROS: This certainly simplifies a lot of problems.

CONS: It is probably illegal because it involves absolutely no consideration of applicable statutory requirements.

2. Yes, by allowing them to meet less stringent requirements and to fill out a less complex application form.

PROS: See No. 1, above.

CONS: We would have to develop a second set of criteria for small dischargers. The argument would be made that we were drawing a distinction not authorized by statute (although the legislative history clearly suggests that some distinction should be draw between municipalities discharing essentially domestic wastes and POTWs discharging wastes containing toxics). Larger communities would accuse us of unequal treatment.

3. No.

PROS: This is certainly an equitable approach. Completion of the entire application should not be an onerous burden on small dischargers of essentially domestic wastes, especially if we provide regional technical assistance, since many portions of the application, which address the problem of toxics control, will not apply to them. Furthermore, in deciding upon individual applications, we can simply require a lesser burden of proof (based on the domestic/toxics wastes distinction in the legislative history).

CONS: This will require substantial regional assistance and coordination. We may hear complaints from larger dischargers for whom such regional assistance presumably will not be available.

F. Whether we want to adopt the "stressed areas" concept in defining "discharge into marine waters".

PROS: This an extremely useful bright line test since it eliminates virtually all dischargers.

CONS: We will be innundated with letters from Congressmen and costal dischargers alleging that there is no scientific basis for our position and that we are thwarting the intent of the statute. We will not have a prayer of supporting this regulation in court without very strong technical support, and, even then, I think our chances of prevailing are slim. Furthermore, if a discharger can show under our regulations that, but for discharging into an area categorized as a "stressed area" by EPA, it would qualify for a modification, such a demonstration might materially weaken the validity of our "stressed area" concept.

G. Whether we want to adopt a geographic approach in defining "discharge into marine waters" -- i.e., exclude all East Coast dischargers.

PROS: This is a very useful bright line test since it would eliminate Boston and Southern Florida (although the latter may not be a problem if the state retains its secondary treatment standard). There is some support for this approach in the legislative history.

CONS: While the legislative history indicates that the term "marine waters" would include coastal waters of the West Coast, Anchorage, etc. it does not expressly exclude the East Coast (except for your letter).

III. We need to talk generally about the following issues:

A. Use of EPA marine water quality criteria (detectable levels, 1976 vs. 1978 standards, standardized methods)

B. List of marine water quality standards under Section 304(a)

C. OMB clearance of application form

D. Judicial review of regulations

E. Procedural regulations (combining with other permit modification procedures)

F. State secondary treatment requirements.

G. Discussion of BPWTT and monitoring costs in preamble.

cc: Charlie Gregg
Andy Mank
Jim Smith

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 3 1 1978

SUBJECT: Proposed Regulations for Implementation of Section 301(h) Modification to Secondary Treatment Requirements for POTW Discharges into Certain Marine Waters -- ACTION MEMORANDUM

FROM: Thomas C. Jorling, Assistant Administrator for Water and Hazardous Materials (WH-556)

TO: Administrator

THRU: AX

PURPOSE

Approval is required for publication of proposed regulations (Tab A) for implementation of Section 301(h) of the Federal Water Pollution Control Act as amended in 1977 by PL 95-217. Section 301(h) authorizes EPA to modify the secondary treatment requirements (biochemical oxygen demand (BOD), suspended solids (SS), and pH) in an existing discharge from a publicly owned treatment works (POTW) into marine waters if certain criteria are met.

BACKGROUND & COORDINATION

Section 301(h) was added to the FWPCA by the Clean Water Act of 1977 in response to claims by West Coast municipal ocean dischargers that, due to the rapid dispersion of wastes which occurs in ocean waters, the levels of biochemical oxygen demand (BOD) and suspended solids removal required by EPA secondary treatment regulations were more stringent than necessary to protect marine water quality and ecosystems. Under Section 301(h) a municipality may obtain a modification of these requirements if (1) it discharges into deep ocean or saline estuarine waters as defined in the Act, and (2) it demonstrates, by showing compliance with eight statutory criteria, that its modified discharge will not result in any increase in the discharge of toxics or otherwise impair the integrity of receiving waters.

The statutory criteria in Section 301(h) provide that a modification of BOD, suspended solids or pH may be granted only where there is a State water quality standard applicable to the pollutant for which a modification is requested. Where applicable water quality standards exist for a pollutant in the discharge, the municipal source can apply

for a modification from the secondary treatment requirement for that pollutant if a showing is made that the applicable water quality standards will be maintained. The criteria require that the modification will not interfere with the attainment or maintenance of that water quality which assures the protection of public water supplies and the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife, and allows recreational activities in and on the water. The criteria further provide that the applicant demonstrate that he has an enforceable pretreatment program, that no other point or non-point source will be required to meet additional requirements because of a modification of the secondary treatment requirement, and that the volume of discharge of the pollutant will not increase beyond that specified in the modified permit for the period during which the modification is granted.

The Clean Water Act of 1977 requires that applications for Section 301(h) modifications be submitted to EPA not later than September 24, 1978. To assure that municipalities will have a reasonable amount of time to assemble the data, studies, analyses and other information which will be required to demonstrate compliance with our Section 301(h) regulations by September 24, 1978, we are aiming for an early April 1978 date for publication of a proposed regulation for public comment and promulgation of a final regulation by June 30, 1978.

While developed over a relatively short period of time, every effort has been taken to coordinate the development of these proposed regulations with the affected EPA Headquarters, Regional and ORD field offices. A task force involving OWHM, OGC, ORD and EN staff has played the lead role in preparing these regulations; Regions I, II, III, IV, VI, IX, and X, plus other Headquarters office staff have also been closely involved in their development (Tab B). This group will also be involved in acting on the applications received under this section. Because of their complexity, political sensitivity, and potential impact on EPA's regulation of ocean pollution, and because they involve a number of major and difficult policy issues, I have personally supervised the development of these regulations for implementing Section 301(h).

NOAA and our EPA Regional offices have been requested to provide available data that may help identify coastal areas where relaxation of secondary treatment requirements cannot be justified due to existing conditions (e.g., seriously stressed, unhealthy marine biota due to existing pollutant loadings, areas lacking the necessary physical features which assure rapid and effective flushing, sensitive and unique marine habitats, etc.). FDA has also been requested to provide information on possible problems concerning commercial shellfish beds and fisheries. We are exploring the possibility of having NOAA and the Regional office staff assist in providing technical assistance in the evaluation of individual applications eventually received.

PUBLIC PARTICIPATION

Although the proposed schedule dictated by the September 24, 1978, statutory application deadline has necessarily affected both the degree and form of public participation achievable in developing these proposed regulations, we have, within these very real time constraints, attempted to provide full opportunity for public review and comment. Meetings have been held with representatives of municipalities, municipal sewage authorities, and public interest groups to discuss issues (Tab C) raised by the modification in general and the statutory criteria in particular. Written public comment on implementation of the criteria has been solicited both informally and through publication of a notice in the Federal Register. A public hearing on the criteria was held in San Francisco on February 22, 1978; over one hundred persons attended and some forty statements were presented. Additional written comments in response to the Federal Register notice and the public hearing have also been received. Since March 15, we have been disseminating a detailed Preliminary Concept Paper to the public; while this has afforded a limited opportunity for pre-proposed comment on the regulations, it will also have the effect of extending the formal comment period by more than two weeks (to more than sixty days).

MAJOR ISSUES

Major issues raised during the development of these regulations are discussed in the preamble to the proposed regulation (Tab A) and in an issue paper (Tab C). Many of these issues are highly technical in nature, and due to the state-of-the-art, are not easily resolved; others are extremely sensitive politically. For these and other reasons, the proposed regulations have been based upon what I believe to be legally as well as environmentally defensible positions.

We have been careful to raise the major issues in the preamble and to request comment on the approach we have taken as well as other approaches that have been suggested for dealing with these complex issues. Our plan is to discuss these matters adequately in the preamble so that where necessary, changes can be made to the proposed regulation in developing the final regulation without reproposal.

ECONOMIC IMPACT

The Section 301(h) provisions do not specifically provide EPA with authority to consider economic factors in granting a modification to secondary treatment requirements. There are, however, serious concerns about the economics and equity in deciding which POTW's should or should not be granted a modification.

The economic results of granting modifications under this authority should lead to a savings in anticipated local expenditures realized by not constructing and operating secondary treatment facilities. Since any savings on the part of the State and Federal government would be channeled into construction of facilities needed in other communities, the economic savings would only be realized by the local authorities receiving the modifications. However, the costs associated with developing the necessary data and analyses, preparing applications, implementing the necessary pretreatment, non-point and non-industrial source control programs, and in carrying out the monitoring activities required by recipients of modifications could, under certain circumstances, be as great or even greater than construction, operation and maintenance of secondary treatment facilities. This is especially possible for smaller communities with toxics in their discharge. We have discussed this matter in detail in the preamble in order to call the reviewer's attention to this point.

While there are no provisions under Section 301(h) to directly consider economic and equity concerns in deciding which POTW's should or should not be granted a modification, the States may serve as the appropriate entity to factor in these concerns since they must concur with any EPA modifications that are granted.

STEERING COMMITTEE

The Steering Committee met in a special session on March 22, 1978, to consider the proposed regulations (in the form of a PRELIMINARY CONCEPT PAPER) pursuant to Section 301(h). For the purpose of that meeting the representatives for several Agency offices were the persons who represent their respective offices on the Clean Water Act Implementation Task Force (ITF). The major issues covered by this proposed regulation package were discussed in detail and agreement was reached on the general approach to take in drafting this regulation package.

RECOMMENDATION

It is recommended that the proposed regulation be approved for publication and public comment.

APPROVE _____

DISAPPROVE _____

DATE _____

CONCURRENCES

J. Bernstein	Concur _____	Nonconcur _____	Date _____
M. Durning	Concur _____	Nonconcur _____	Date _____
W. Drayton	Concur _____	Nonconcur _____	Date _____
S. Gage	Concur _____	Nonconcur _____	Date _____
S. Jelinek	Concur _____	Nonconcur _____	Date _____
D. Hawkins	Concur _____	Nonconcur _____	Date _____
C. Warren	Concur _____	Nonconcur _____	Date _____
J. McCabe	Concur _____	Nonconcur _____	Date _____
E. Roush	Concur _____	Nonconcur _____	Date _____
B. Blum	Concur _____	Nonconcur _____	Date _____

Enclosures

- Tab A: Proposed Section 301(h) Regulation
  Tab B: Task Force and other EPA Staff closely involved in regulation development
  Tab C: Issue Paper

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EXHIBIT 6 Attached to REd-Border Reivew package for Costle sign-off from Jorling

Tab C

ISSUE PAPER

SUBJECT

Proposed Regulations Implementing Section 301(h) Modifications to Secondary Treatment Requirements for Discharge into Certain Marine Waters

ISSUE PAPER

BACKGROUND

Section 301(h) of the Federal Water Pollution Control Act as amended in 1977 authorizes EPA to modify the requirement of secondary treatment for biochemical oxygen demand (BOD), suspended solids (SS), and pH in an existing discharge from a publicly owned treatment works (POTW) into marine waters if certain criteria are met.

The Federal Water Pollution Control Act of 1972 required publicly owned treatment works to provide secondary treatment of their wastewaters by July 1, 1977. Publicly owned treatment works on the West Coast that discharge their wastewater through ocean outfalls have argued that the reduction of BOD, suspended solids and pH resulting from secondary treatment is not necessary to protect the marine environment because of the dilution achieved in some deep marine waters. The Congress determined that there should be a mechanism by which communities making this argument can test their case before the public in an administrative process. Under the amendments adopted by Congress in 1977, those publicly owned treatment works which can show that an existing deep marine discharge requires less than secondary treatment for BOD, suspended solids and pH may be eligible, after case-by-case review, for a modification of the requirement to provide secondary treatment.

The statutory criteria in section 301(h) provide that a modification of BOD, suspended solids or pH may be granted only where there is a State water quality standard applicable to the pollutant for which a modification is requested. Where applicable water quality standards exist for a pollutant in the discharge, the municipal source can apply for a modification from the secondary treatment requirement for that pollutant if a showing is made that the applicable water quality standards will be maintained. The criteria require that the modification will not interfere with the attainment or maintenance of that water quality which assures the protection of public water supplies and the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife, and allows recreational activities in and on the water. The criteria further provide that the applicant demonstrate that he has an enforceable pretreatment program, that no other point or nonpoint source will be required to meet additional requirements because of a modification of the secondary treatment requirement, and that the volume of discharge of the pollutant will not increase beyond that specified in the modified permit for the period during which the modification is granted.

Section 301(h) applies only to "marine" discharges. The term "marine" discharge is defined as:

> ...a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 202(a)(2) of this Act.

Subsection 101(a)(2) of the Act calls for achievement by 1983 of water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water wherever attainable.

Congress placed the burden of demonstrating entitlement to a modification of the secondary treatment requirement solely on the applicant. To be eligible for a modification all applications must be made by September 24, 1978, and to be approved they must, on their face, provide sufficient justification for granting the application. The burden of proof to show compliance with the criteria means that before applying applicants must know, among other factors: the composition of their wastes, what industrial and non-industrial sources are contributing to their wastes, what happens to the wastes after they are discharged, and the impacts upon water quality and the biota in the coastal zone. The stringent criteria of section 301(h) reaffirm the basic policy of the Federal Water Pollution Control Act "to restore and maintain the chemical, physical, and biological integrity of the nation's waters."

Congress has determined the continued release of pollutants into the nation's waters, including the coastal waters of the oceans, to be inconsistent with this basic objective of restoring and maintaining the integrity of the nation's waters. Thus, the policy of the Act is to move progressively toward eliminating such discharges of pollutants.

The most important resource of the coastal zone is the biota. Congress recognized this in establishing the stringent criteria in section 301(h). Many of the constituents of both municipal and industrial waste are persistent organic and inorganic chemicals; chemicals about which we know very little especially upon their entrance into the ocean and their uptake into biogeochemical cycles.

Many of the biota are extremely sensitive to small changes in the chemistry of their environment and have the ability to bioaccumulate these materials.

The importance of the biota, their sensitivity and their ability to bioaccumulate toxicants raises two issues in regulating ocean outfalls: the concepts of "threshold for effects" and "assimilative capacity." The assumption is made that there are concentrations of any substance below which effects are either non-existent or small enough to be negligible. This concentration becomes the "threshold for effects." Another assumption

is made that all natural systems (including marine aquatic systems) have a generally applicable "assimilative capacity" for absorbing wastes, including toxicants. and for rendering them innocuous. As Congress recognized in section 301(h), the assumption that there is an assimilative capacity for naturally occurring organic matter may have some justification. However, Congress also recognized that in our complex society the suspended solids in municipal wastes are often contaminated with persistent as well as bioaccumulative industrial toxicants for which the assimilative capacity is non-existent.

A most important point to remember when considering the use of threshold levels and assimilative capacity is that they may not be intrinsic properties of natural systems; they have been assigned to them for convenience in the disposal of wastes. Experience with ionizing radiation, pesticides, and other toxicants shows that there is no objective basis for assigning a threshold concentration for such substances in nature for several reasons, the most important being the capacity for living systems to concentrate such substances (e.g., DDT and most of the chlorinated hydrocarbons) in unpredictable ways. A regulatory policy based on the assumption of a threshold level or an assimilative capacity for toxic pollutants, especially over time, is bound to fail. The Federal Water Pollution Control Act clearly recognizes this flaw.

While Congress recognized that evidence may exist to support a modification to the secondary treatment requirements from BOD, suspended solids, and pH, it emphasized through the 301(h) criteria that the modification should not allow for additional amounts of toxic pollutants such as heavy metals, synthetic organic compounds, and other toxicants listed under section 307(a). Since less than secondary treatment of wastewater provides very limited removal of these toxic pollutants which are included within the suspended solids, publicly owned treatment works handling domestic wastes may have a lesser burden of proof to demonstrate compliance with 301(h) criteria. Highlighting the concern over toxicants, Senator Muskie said in the Senate debate on section 301(h):

> "This provision for modification would be available only to systems which are providing waste treatment services to users which contribute primarily domestic-type wastes or which have sufficient control over industrial input so as to prohibit any 307-type pollutants from entering this system.
>
> "Any complex system which is treating wastes for a myriad of industrial and commercial establishments within a metropolitan area could never meet the requirements of this modification procedure unless the control of industrial input was thorough enough to assure that no toxics or other incompatible pollutants pass directly into the ocean environment.
>
> "Primary treatment does not deal with these kinds of constituents. Therefore, their presence as an input into municipal waste streams is a prima facie indication that the secondary treatment modification provision is not applicable.

While we know little about the effect of continued release of persistent pollutants to the oceans, we do know that oceans are vital to the biosphere that supports all life now and for future generations, and that Congress clearly indicated that applicants must adequately account for toxics removal as a part of applying for modifications to secondary treatment requirements. In deciding upon a modification, the decisions will be made on the basis of long term effects, even though any modification will be limited to 5 years, since chronic effects are of greatest concern in protecting the integrity of the ocean.

General Concerns:

Many of the more substantial issues concerning this regulation are highly technical in nature. They include issues ranging from the physical and chemical characteristics of the receiving water, through concerns for the long term, short term and/or cumulative effect of discharges on marine life, through questions on the need for and practicality of using indicator species as early warning signals.

The state of the art vis-a-vis ocean pollution, does not lend itself to clear-cut resolution of several of these technical issues. At the same time, however, there are serious concerns about economics and equity in deciding who should or should not be granted a modification. As a result, the entire ocean discharge matter is extremely sensitive politically. For these and other reasons, our regulations must be based on legally defensible positions as much as they are on environmental factors.

Major Issues:

1. Whether a 301(h) modification may be granted for a discharge into the contiguous zone (the problem is an inconsistency on the face of the statute -- the requirement that there be a state water quality standard in section 301(h)(1) vs the reference to "contiguous zone" in the statutory definition of "discharge into marine waters").

   OPTIONS:

   A. No modification may be granted for a discharge into the contiguous zone.

      PRO: This is a simple clear-cut test which would follow a narrow but close interpretation of the statute.

      CON: The Office of General Counsel feels that our construction of the statute is not a reasonable resolution of the conflicts on the face of the statute, given the purpose of and scientific basis for section 301(h).

B. Modifications may be granted if the discharger meets state water quality standards for the territorial seas nearest the discharge.

PRO: For the reasons stated above, this is probably the only reasonable (and therefore judicially sustainable) interpretation of section 301(h).

CON: This requires the application of state water quality standards not developed for the contiguous zone.

Recommendation for Proposed Regulation: OPTION B

2. What constitutes an "existing discharge"?

OPTIONS:

A. The applicant's discharge as of the effective date of the law, December 27, 1977 -- i.e., no changes may be made in the nature of treatment, location of the discharge, nature of the diffuser, etc.

PRO: This serves as a very clear cut-off point. There is considerable support for this position in the legislative history; as Senator Muskie stated during debates on the conference bill, 301(h) is premised on hearing testimony by coastal municipal dischargers that "they have accumulated sufficient evidence to prove no adverse effect on water quality and aquatic ecosystems from such discharges." Additionally, the statute contemplates that any extensions of modified permits beyond five years will be based on extensive biomonitoring data collected during the life of the permit. If modifications to the discharger's treatment system or outfall are not completed for three or four years after the permit is issued (likely in many cases), EPA will not have the long-term monitoring data needed to make extension decisions.

CON: This test may cut out many small domestic dischargers (such as the Pacific Islands, Puerto Rico, the Virgin Islands and Alaska) which will need to relocate their outfalls or upgrade treatment in order to qualify for the modification. Also, our interpretation of the provisions would be subject to legal challenge since arguably the "evidence" collected by coastal communities could include evidence on which a predictive judgement of the impact of a modified discharge could be made. Some communities have already made this argument to us.

B. Allow limited modifications of the discharge, but require that such modifications be made by a certain time and state in the preamble that applicants seeking a modification based on a modified discharge containing toxics will bear an extremely heavy burden of proving that an accurate predictive assessment

of the effect of their modified discharge can be made and will be subject to revocation of their modification if (1) the modifications are not completed within the time specified in the permit, or (2) their predictive judgements prove to be incorrect.

PRO: This would allow us to grant modifications for small dischargers of essentially domestic wastes who will have to modify their discharge (e.g., moving it from a lagoon to deeper waters) in order to qualify for a modification. This approach also would probably be a more overall reasonable interpretation of the statute politically.

CON: We lose our clear cut-off point. We will have to figure out what is a reasonable time for completing any necessary modifications (e.g., as soon as possible but not later than time for meeting secondary treatment requirements in an ECSL or 301(i) extension). We will have to determine whether the applicant should be permitted to factor in pretreatment standards which may be in effect at the time the modification is required to be completed. It will be difficult to make a predictive judgement as to the effect of non-existent discharges. Dischargers exaggerate the degree of toxic removal which can be obtained with upgraded systems and underplay environmental impact. Inevitably, dischargers will not make the modifications on time, and we will find ourselves with a major compliance problem (or, alternatively, we could take a tough approach and revoke the modified permit). Finally, allowing the submission of applications for a modified discharge might weaken our no-retreat-from secondary position.

Other major questions raised by this Option:

- o What constitutes "limited modification" of the discharge? Would we consider relocation of outfall, changes in diffuser, partial upgrade (but not to secondary) of treatment, etc.?
- o Should planned (Step 1 or 2) outfalls or outfalls under construction (Step 3) but not completed be considered?
- o Should existing secondary facilities wishing to back off on treatment levels to save O&M be considered?

Recommendation for Proposed Regulation: OPTION A; but continue to explore mechanisms for special cases by requesting comments.

3. Whether applicants should be required to have all application information in by September 24, 1978.

OPTIONS:

A. We can take a restrictive approach that the application must be substantially complete as of September 24, 1978.

PRO: This would function as a clear cut test, since some municipalities won't be able to make the September 24, 1978 date. There is support for this approach in Muskie's statement on the conference bill and in other statements during both Senate and House debates that modification decisions must be made expeditiously.

CON: Some dischargers have already told us that they will not be able to put together the necessary information by September 24, 1978. The deadline may pose a problem for some of the small dischargers of essentially domestic wastes who should ideally be granted the modification (however, this hurdle could probably be overcome by providing regional technical assistance for these applicants). If there is any major delay in proposing/promulgating our section 301(h) regulations, municipalities will claim that their inability to meet the September 24, 1978 deadline is in part attributable to EPA; a court might be receptive to that kind of equitable argument. There is also the possibility that a court might interpret the 270 day deadline as requiring only that a request (as opposed to a completed application) for modification be submitted by September 24, 1978; we could make a reasonably good case against this kind of argument based on the legislative history of section 301(h).

B. We can extend the September 24, 1978 deadline for a limited period (e.g., two months).

PRO: This might give some of the small dischargers a better chance for putting together the information necessary to qualify for a modification.

CON: As a practical matter, a short extension will probably not be very meaningful to the applicants and they will insist on a longer extension -- (e.g., six months to 1 year or more). Furthermore, once we relent on a firm September 24, 1978 deadline, we will have some difficulty in justifying denials of individual requests for extensions.

Recommendation for Proposed Regulation: OPTION A; but continue to explore mechanisms for being flexible in final regulation without extending the time interval to a point of delaying EPA's review and approval process.

4. Whether we will consider changes in State water quality standards made after September 24, 1978.

OPTIONS:

A. No.

PRO: This is consistent with our position that an application must be complete upon submission. It will also give States less time to modify their water quality standards (as California appears to be doing) in order to facilitate the granting of section 301(h) modifications to dischargers in their state.

if we provide regional technical assistance, since many portions of the application, which address the problem of toxics control, will not apply to them. Furthermore, in deciding upon individual applications, we can simply require a lesser burden of proof (based on the domestic/toxics wastes distinction in the legislative history).

CON: This will require substantial regional assistance and coordination. We may hear complaints from larger dischargers for whom such regional assistance presumably will not be available.

Recommendation for Proposed Regulation: OPTION C; but continue to explore mechanisms for implementing OPTION A or B.

6. Whether we want to adopt the "stressed areas" concept in defining "discharge into marine waters."

PRO: This is an extremely useful cut-off test since it will discourage applicants from applying for modifications in specific stressed areas due to increased burden of proof or a clear cut not eligible sign by EPA.

CON: We will need very strong technical support to support this concept in court. Furthermore, if a discharger can show under our regulations that, but for discharging into an area categorized as a "stressed area" by EPA, it would qualify for a modification, such a demonstration might materially weaken the validity of our "stressed area" concept.

Recommendation for Proposed Regulation: Identified as an area we are exploring. Continue to work with Regions, NOAA, FDA, etc., in developing and defending these concepts for inclusion in final regulation.

7. Whether we want to adopt a geographic approach in defining "discharge into marine waters" -- i.e., exclude all East Coast dischargers.

PRO: This is a very useful clear cut test. There is some support for this approach in the legislative history.

CON: While the legislative history indicates that the term "marine waters" would include coastal waters of the West Coast, Anchorage, etc., it does not expressly exclude the East Coast (except for Mr. Jorling's letter submitted as a part of Sen. Muskie's testimony).

Recommendation for Proposed Regulation: Identified as an area we are exploring. Continue to work with Regions, NOAA, FDA, etc., in developing and defending these concepts for inclusion in final regulation.

8. What role should economics play in determining which POTW's receive modifications?

As passed, the 301(h) provision does not provide EPA with the authority to consider economic factors in granting a modification. Since States must concur with any EPA modifications that are granted, they may serve as the appropriate entity to factor in economics and equity in determining who should and should not receive modifications.

9. What should be encompassed by a "balanced indigenous population of shellfish, fish, and wildlife"?

"Balanced indigenous population of shellfish, fish, and wildlife" is clearly defined for the purposes of this regulation in the definitions section. Since this concept (as are others) will be a controversial one, it is discussed within the preamble as well as defined in the regulation; comments on this concept and others are encouraged.

10. How will cumulative impacts of several discharges into the same area of receiving water be handled?

We plan to consider all discharges into the same area of receiving water at the same time in order to account for their potential cumulative effects. The States will also be encouraged to do this when evaluating loadings with respect to State water quality standards.

11. What role should the State play in screening, evaluating, and approving applications?

The States are required to provide certification that State water quality standards and other requirements are met. The States also must concur with any modifications that EPA grants.

12. Will Federally owned treatment works qualify for potential modifications under this regulation?

This is a legal issue that is under consideration by OGC.

13. Have adequate provisions for public participation been provided for in the development of this regulation?

Although the proposed schedule dictated by the September 24, 1978 statutory application deadline has necessarily affected both the degree and form of public participation achievable in developing these proposed regulations, we have, within these very real time constraints, attempted to provide full opportunity for public review and comment. Meetings have been held with representatives of municipalities, municipal sewage authorities, and public interest groups to discuss issues raised by the modification in general and the statutory criteria in particular. Written public comment on implementation of the criteria was solicited both informally and through publication of a notice in the Federal Register. A public

hearing on the criteria was held in San Francisco on February 22, 1978; over one hundred persons attended and some forty statements were presented. Additional written comments in response to the FR notice and the public hearing have also been received. Since March 15, copies of a detailed PRELIMINARY CONCEPT PAPER have been disseminated to the public; while this has afforded a limited opportunity for pre-proposal comment on the regulations, it will also have the effect of extending the formal comment period on the proposed regulations by more than two weeks. Also, the procedural regulations will provide for full public participation in individual section 301(h) permit issuance proceedings.

14. Can modifications be revised or revoked under certain circumstances once granted?

    Yes, for cause (e.g., failure to establish an acceptable biomonitoring or pretreatment program as represented in a discharger's application and permit).

15. Will the cost of preparing applications and implementing various requirements of section 301(h) such as the monitoring program be grant eligible?

    Certain aspects of the application and monitoring requirements will be grant eligible to the extent that they are consistent with the scope of facilities planning activities being conducted using Step 1 grants. Long-term monitoring and other activities related to the operation and maintenance of the facility, however, would not be grant eligible. These matters are not within the scope of the present regulation and will be handled through separate implementing guidance.

EXHIBIT 7

ENVIRONMENTAL PROTECTION AGENCY

APR 07 1978

MEMORANDUM

TO: Joan Z. Bernstein
General Counsel (A-130)

FROM: Lisa Friedman, Attorney
Water Quality Division (A-131)

THRU: James A. Rogers
Associate General Counsel
Water Quality Division (A-131)

SUBJECT: Proposed Regulations Implementing Section 301(h) of the Clean Water Act

Attached is a proposed regulation which establishes the criteria which will be applied and the procedures which will be followed by EPA in acting on applications for NPDES permits under Section 301(h) of the Clean Water Act. Section 301(h), which was added to the Act by the Clean Water Act of 1977, authorizes EPA to issue an NPDES permit which modifies the requirements of secondary treatment (i.e., relaxes EPA effluent limitations for biochemical oxygen demand (BOD), suspended solids, and pH) for publicly-owned treatment works (POTWs) which discharge into certain ocean and estuarine waters where the POTW demonstrates that it will fully control the discharge of toxics and that its modified discharge will not impair the integrity of receiving waters. Because Section 301(h) represents a significant departure from the technology-based philosophy of the 1972 Act, it is of major concern to the Agency.

The implementation of Section 301(h) raises a host of difficult and complex policy and technical issues, many of which are discussed in the action memorandum and issue paper which accompany the attached proposal package. The major legal problem posed by Section 301(h) is as with many other provisions of the Clean Water Act of 1977, a difficult and conflicting legislative history. The House views the

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provision as a fairly broad exemption, the Senate as an extremely narrow one. Because Section 301(h) is a Senate provision, EPA is following the Senate's lead and developing stringent environmental criteria for permit issuance.

The Agency will be utilizing a number of rather innovative approaches in this regulation to simplify and expedite decisionmaking. One is "bright line" tests, minimum threshold requirements which will operate to screen out applicants early in the decisionmaking process. Another is a standardized application form to assure that technical data is distilled by the applicant and submitted in a uniform manner. A third is the long dormant "initial licensing" procedures of the Administrative Procedure Act, which we hope will streamline evidentiary hearings, expedite administrative appeals, and obviate some of the separation of functions problems encountered in Seabrook. The procedural regulations being adopted in this regulation will serve as the model for proposed regulations for other NPDES permit modification and extension proceedings, as well as similar proceedings under the Safe Drinking Water and Clean Air Acts.

We expect a great deal of litigation to be generated by both the regulations implementing Section 301(h) and the Agency's decisions on individual permit applications. At stake are approximately $2 billion in secondary treatment construction costs (plus operating and maintenance expenses) for approximately 250 municipalities (including Los Angeles, Boston and Seattle). At least half a dozen public interest groups have already indicated that they will seek to strictly limit the scope of the provision.

I have worked closely with the program office and Bill Pedersen in developing the attached proposed regulations and will continue to do so as they are being finalized. I recommend that you concur in their proposal without comment.

EXHIBIT 8

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: APR 25 1979

SUBJECT: Final Regulations For Implementation of Section 301(h) Modification to Secondary Treatment Requirements for POTW Discharge into Marine Waters — ACTION MEMORANDUM

FROM: Thomas C. Jorling, Assistant Administrator for Water and Waste Management (WH-596)

TO: Administrator

THRU: AX

PURPOSE

Approval is required for publication of final regulations for implementation of section 301(h) of the Clean Water Act as amended (PL 95-217). Section 301(h) authorizes EPA to modify the secondary treatment requirements (biochemical oxygen demand, suspended solids, and pH) for a discharge from a publicly owned treatment works (POTW) into marine waters if certain criteria are met.

BACKGROUND

On April 25, 1978, we published proposed regulations which contained both the criteria and procedures to be employed by EPA in acting upon applications for issuance of a section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit (43 FR 17484). Since the focus of section 301(h) involves issuance of a modified NPDES permit, these final regulations are published under Title 40 Part 125, Subpart G in order to incorporate them into the NPDES permit regulations. The procedures proposed for 301(h) decision-making — Non-Adversary Initial Licensing — are published under Title 40 Part 124, Subpart J, also of the NPDES regulations, and are not part of this regulation. These final regulations contain only the criteria to be used in the review of applications for a section 301(h) modified permit.

Under these final regulations, a POTW may obtain a modification of the secondary treatment requirements if: (1) it discharged into ocean or saline estuarine waters on December 27, 1977 and, (2) it demonstrates, by showing compliance with criteria contained in these regulations, that its modified discharge will not impair the integrity of receiving waters, and programs will be implemented to control toxic pollutants and monitor impacts of the modified discharge on the receiving water environment.

These final regulations revise certain requirements contained in the proposed regulations. We have revised the definition of "existing discharge" to allow consideration of improved discharges, which increases the number of applicants that may apply for 301(h) modifications. In

view of their unique circumstances, we have encouraged Native Alaskan Villages, U.S. Territories and Puerto Rico not to apply, since their problems can be handled better through other mechanisms. We have revised our approach to the control of toxic pollutants, and placed emphasis on implementation of source controls with provisions for more stringent requirements, to protect the environment if needed. We reorganized and clarified the regulations, the criteria, and application requirements. We retained the application format to assist in the preparation and review of applications. We prepared and published for public comment a Technical Support Document that helps explain our rationale and provides technical guidance to applicants on certain topics. We improved and clarified the provisions, dealing with a balanced indigenous population of fish, shellfish and wildlife. Finally, we established a deadline for submittal of final application at 90 days after the date these regulations are published.

MAJOR ISSUES

In anticipation of some revision in the final regulations, we were careful to raise the major policy issues in the preamble of the proposed regulations in order to avoid a need for reproposal. The possibility of making some revisions were brought to the attention of the public and the Agency received extensive comment on these areas. These policy issues are discussed at length in the preamble of the final regulations. As noted below, lack of available resources to expeditiously implement this effort may lead to difficulty in management of the construction grant program in states with large numbers of 301(h) applicants.

ECONOMIC AND ENVIRONMENTAL IMPACTS

These regulations have been designed to insure that no POTW will receive a modification if its discharge will result in adverse water quality impacts where the national water quality goal of a balanced, indegenous population of fish, shellfish and wildlife will not be attained; or otherwise meet the requirements of section 301(h). Additionally, we have included requirements for conformance with applicable provisions of the Coastal Zone Management Act, Marine Research and Estuarine Protection Act, and the Endangered Species Act. Also, we require that comprehensive monitoring programs be implemented and that contingencies be provided for the construction of secondary treatment facilities, if needed.

The primary economic impacts consist of reduced capital and O&M expenses for less than secondary treatment, versus the cost of preparing an application and complying with the requirements of a modified permit.

Potential capital cost reductions resulting from modifications depend on the amount of construction associated with modifications, such as improvements to existing treatment facilities, diffuser and outfall improvement. This figure will be unknown until applicants submit their proposals including alternate funding programs. Based on 90 expected applicants, a total of 4.6 billion dollars is potentially impacted by 301(h) decisions (Tab B). This estimate, drawn from the municipal needs survey, must be qualified since an unknown portion of the funds will be used to construct facilities to comply with a modification while others will be required to construct full secondary facilities. This estimate of 4.6 billion for ninety POTWs generally coincides with an earlier (1974) EPA task force that estimated 2.26 billion dollars would be required to convert 60 POTWs from primary to secondary treatment. This figure however, did not include outfall construction or provisions for increases in flow capacity. This same task force observed that energy requirements, operation and maintenance costs for primary and advanced primary treatment could be 50 percent lower than secondary treatment depending upon the size of the facility and type of treatment technology employed.

The cost of preparing a 301(h) application is expected to range from 25,000 to 300,000 dollars depending upon the extent to which previous studies have been made, the scope of improvements proposed, character of the discharge, and sensitivity of receiving marine waters. If a modification is granted, POTWs will incur additional costs to comply with certain monitoring and reporting requirements not ordinarily imposed on discharges with secondary treatment. These costs will vary, based on the type of toxic substances in the discharge, size of discharge, and nature of the monitoring program. These costs are estimated to range from approximately 160,000 to 520,000 dollars per year per POTW. (TAB B). The average annual cost (assuming 90 applicants) to comply with the application and monitoring requirements is approximately 35 million dollars.

On the basis of this preliminary analysis, it appears that the costs of constructing and operating secondary treatment facilities far exceeds the cost of applying for and receiving a modification.

RESOURCE AND ORGANIZATIONAL IMPACTS

Approximately 90 of the 225 POTW's who submitted preliminary applications are expected to submit final applications. The remainder either are encouraged not to apply, such as Native Alaskan Villages and U.S. territorial possessions; or are not eligible to apply, e.g., those without discharges on December 27, 1977; and those that have already complied with the secondary treatment requirements (TAB A).

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Since the requirements of section 301(h) impact numerous EPA programs, the organizational approach to implementation is unique in that a Headquarters task force will be used. This task force will consist of staff from EPA Headquarters, Regions, Office of Research and Development/Corvallis Environmental Research Laboratory, and National Oceanographic and Atmospheric Administration. This scientific/technical group with the assistance of a technical support contractor will be responsible for reviewing the 301(h) applications, and making recommendations. EPA Regional offices will be responsible for administering public hearings, permit proceedings, and permit issuance. However, only the Administrator is authorized to make the final decision on each modified permit.

Because of the need to maintain a linkage between these various Agency units and applicants at distant locations, frequent travel will be required. Therefore, it is vitally important that sufficient travel ceiling be provided to this effort.

Implementation of all phases of the program during Fiscal Years 79 and 80 will exceed available resources. We estimate that available resources will be adequate to complete technical review of the applications, develop preliminary decision documents, and prepare draft permit terms and conditions during Fiscal Years 79 and '80. However, existing Regional EPA staff resources for 301(h) will not be adequate during Fiscal Years 79 and 80 to administer the number of hearing proceedings we anticipate. Resource shortfalls are particularly acute in Regions IX and X. Therefore, unless current permit issuance priorities are changed or additional resources made available, it is unlikely that EPA will be able to complete issuance of final permits until after Fiscal Year 82. Delays of this magnitude may hamper management of the construction grant program in those states where impacted projects constitute a substantial portion of their allotments (TAB B).

PUBLIC PARTICIPATION

Extensive public participation has gone into the development of these regulations. Public meetings were held on the preliminary concept papers prior to preparation and publication of the proposed regulations. Public hearings were held on the proposed regulations in Washington and Seattle on June 2, and June 8, 1978. EPA received over 100 written comments and extensive testimony on the proposed regulations. These comments were considered by the regulation development task force composed of staff representation from all affected EPA Headquarters, Regional offices, and field labs. Additionally, we also distributed our interim Technical Support Document for public comment and considered responses and suggestions in completing its development.

ANTICIPATED REACTIONS

Judging from the amount of interest that the Section 301(h) program has received since its inception, we expect substantial reaction to the final regulations. This conclusion is based on several factors; namely, (1) there are 225 preliminary applications on file, including 104 Native Alaskan Villages and small communities in the U.S. territorial possessions and Puerto Rico; (2) during the development of these regulations, we received over one-hundred written comments on the pre-proposal development document and proposed regulation; and finally (3) the economic advantages and environmental issues are squarely at odds.

We anticipate that reactions will range from very favorable to completely opposed. Favorable reactions will probably come from those groups who preceive these final regulations as a relaxation of a "harsh and unreasonable" position taken by the Agency in the proposed regulations, particularly with respect to the definition of an existing discharge. In contrast, other interests, particularly the National Resources Defense Council (NRDC) and the National Wildlife Federation (NWF), may view the final regulations as to lax. In this regard, we have already been notified by NRDC by letter, dated June 15, 1978, that they intend to commence a civil action against the Agency upon promulgation of these regulations. NRDC's letter is intended to serve notice to the Agency, as required by Section 505(c) of the Act and 40 CFR Part 135.

NRDC cites two bases for commencement of court action against the Agency, (1) the failure to issue regulations in a timely manner, and (2) the issuance of regulations which are contrary to the Act. NRDC cites a number of areas in which it believes the Act requires the Agency to adopt strict requirements, including (1) the definition of an "existing discharge"; (2) the geographical location of applicants; (3) the hydrological and geological characteristics of the receiving waters; (4) the control of toxic pollutants; (5) the definitions of a "balanced, indigenous population"; (6) pretreatment enforcement; and, (7) the procedures to be employed in decision making.

RECOMMENDATION

It is recommended that the final regulations be approved for publication.

CONCURRENCES

J. Bernstein	Concur_____	Nonconcur_____	Date _____
W. Drayton	Concur_____	Nonconcur_____	Date _____
M. Durning	Concur_____	Nonconcur_____	Date _____
S. Gage	Concur_____	Nonconcur_____	Date _____
D. Hawkins	Concur_____	Nonconcur_____	Date _____
S. Jelinek	Concur_____	Nonconcur_____	Date _____
W. Hedeman	Concur_____	Nonconcur_____	Date _____
J. Roush	Concur_____	Nonconcur_____	Date _____
C. Warren	Concur_____	Nonconcur_____	Date _____
B. Blum	Concur_____	Nonconcur_____	Date _____

Enclosures

Tab A: Status of 301(h) Applicants
Tab B: Cost Estimates
Tab C: Workload Analysis
Tab D: Preamble and Regulations/Application Format
Tab E: Technical Support Document

VII

STATUS OF 301(h) APPLICANTS
IN RELATION TO 301(h) REGULATION
POLICIES: BY REGION

Status Category	Reg. I	Reg. II	Reg. III	Reg. IV	Reg. IX	Reg. X	TOTAL
Prelim. applications received	12	33	4	2	47	127	225
Applications requiring review	12	14	4	0	23	37	90
Applications without discharge on 12/27/79	0	7	0	0	7	5	19
Applications from existing secondary discharges	0	10	0	2	4	11	27
Applications from Territorial Possessions	0	14	0	0	17	0	31
Applications from Alaskan Native Villages	0	0	0	0	0	69	69
Applications from Federal Facilities	0	0	0	0	2	4	6
Qualifying facilities with industrial contributors	7-8	13	2	0	15-19	11-13	48-54
Size of qualifying dischargers							
MGD							
0 - 5	5	0	2	0	3	21	31
6 - 49	6	9	2	0	12	7	36
50 - 99	0	1	0	0	0	2	3
100 +	1	4	0	0	6	2	13

TABLE 1

Facilities Eligible for Review

NAME		STATE	REGION
1.	Gosnold	Mass	I
2.	Mass. Metro District	Mass	I
3.	S. Essex Sewerage Dist.	Mass	I
4.	Swampscott	Mass	I
5.	New Bedford	Mass	I
6.	Portland	Maine	I
7.	Bangor	Maine	I
8.	Groton	Maine	I
9.	Lynn	CT	I
10.	Newport	RI	I
11.	Fall River	Mass	I
12.	Gloucester	Mass	I
13.	Newtown Creek	NY	II
14.	Owls Head	NY	II
15.	Coney Island	NY	II
16.	North River	NY	II
17.	Red Hook	NY	II
18.	Mamaroneck Sewer Dist.	NY	II
	Arecibo Regional	PR	II
	Aquadilla	PR	II
21.	Barceloneta	PR	II
22.	Mayaguez	PR	II
23.	Ponce	PR	II
24.	Oakwood Beach	NY	II
25.	Port Richmond	NY	II
26.	Bayamon	PR	II
27.	Rehoboth Beach	Del	II
28.	Lewes	Del	II
29.	Lamberts Point	VA	II
30.	Chesapeak-Elizabeth	VA	II
31.	Honouliulu	HI	IX
32.	San Island	HI	IX
33.	Waianae	HI	IX
34.	Kailua-Kaneohe	HI	IX
35.	Ventura Regional City	CA	IX
36.	Goleta	CA	IX
37.	Morro Bay	CA	IX
38.	Pacifica	CA	IX
39.	San Diego	CA	IX
40.	Santa Cruz	CA	IX
41.	Orange County	CA	IX
42.	Los Angeles Co.	CA	IX
43.	SW Plant (S.F.)	CA	IX
44.	SE Plant (S.F.)	CA	IX
45.	Richmond-Sunset (S.F.)	CA	IX

	NAME	STATE	REGION
	Watsonville	CA	IX
	Encino WPCF	CA	IX
48.	San Diego	CA	IX
49.	Hyperion STP (L.A.)	CA	IX
50.	East Bay Mun. Util. Dist.	CA	IX
51.	Hilo	HI	IX
52.	Eureka	CA	IX
53.	Pago-Pago	T.T., Samoa	IX
54.	Sitka	AK	X
55.	Coupeville	WA	X
56.	Dillingham	AK	X
57.	Seldovia	AK	X
58.	Skagway	WA	X
59.	Mason Co.	WA	X
60.	Sequim	WA	X
61.	Anchorage	AK	X
62.	Ketchikan	WA	X
63.	Lynnwood	WA	X
64.	Penn Cove Park	WA	X
65.	Westside Water District	WA	X
66.	Port Townsend	WA	X
67.	Tacoma (No. 1)	WA	X
68.	Tacoma (No. 2)	WA	X
	Tacoma (No. 3)	WA	X
	Manchester	WA	X
71.	Mukilteo	WA	X
72.	Anacortes	WA	X
73.	Richmond Beach	WA	X
74.	Carkeek Park	WA	X
75.	West Point	WA	X
76.	Alki	WA	X
77.	Bellingham	WA	X
78.	Whittier	AK	X
79.	SW SSD (2 fac.)	WA	X
80.	Steilacoom	WA	X
81.	Friday Harbor	WA	X
82.	Bethel	AK	X
83.	Metlakatla	AK	X
84.	" (Annett office)	AK	X
85.	Skagit Co.	WA	X
86.	Des Moines	WA	X
87.	Langley	WA	X
88.	Port Angeles	WA	X
89.	Seward	AK	X
90.	Duwamish	WA	X

TABLE 2

301(h) APPLICANTS W/O EXISTING DISCHARGES[a]

	APP#	NAME	STATE	REGION
1.	32	Carolina	P.R.	II
2.	33	Dorado	P.R.	II
3.	34	Fajardo	P.R.	II
4.	35	Guayama	P.R.	II
5.	36	Guayanilla	P.R.	II
6.	37	Humacao	P.R.	II
7.	123	Suffolk County	N.Y.	II
8.	13	Monterey	CA	IX
9.	24	Dedeo	Guam	IX
10.	92	Majuro	T.T.	IX
11.	93	Lelu	T.T.	IX
12.	93.5	Tafunsak	T.T.	IX
13.	94	Utwe	T.T.	IX
14.	95	Malen	T.T.	IX
15.	1	Unalaska	AK	X
16.	50	Chambers Creek	WA	X
17.	69	Pelican	AK	X
18.	193	Kotzebue	AK	X
19.	120	Wasilla	AK	X

a/ Current analysis of preliminary applications

TABLE 3

301(h) APPLICATIONS HAVING EXISTING SECONDARY POTW'S

	APP#	NAME	STATE	REGION
1.	105	Wards Island	NY	II
2.	106	Tallman Island	NY	II
3.	107	Jamaica	NY	II
4.	108	Rockaway	NY	II
5.	109	Bowery Bay	NY	II
6.	110	Hunts Point	NY	II
7.	111	26th Ward	NY	II
8.	209	Inwood	NY	II
9.	210	Bay Park	NY	II
10.	211	Cedar Creek	NY	II
11.	103	Virginia Key	FL	IV
12.	104	North District	FL	IV
13.	10	Pismo Beach	CA	IX
14.	132	Humboldt Bay	CA	IX
15.	212	Redwood Junior College	CA	IX
16.	219	Marina County	CA	IX
17.	2	Haines	AK	X
	12	Juneau	AK	X
19.	15	Auke Bay	AK	X
20.	23	Sekiu Point	WA	X
21.	26	Wrangell Institute	AK	X
22.	27	Wrangell	AK	X
23.	40	Clallam Bay	WA	X
24.	42	Kodiak	AK	X
25.	204	Kenai	AK	X
26.	223	Tamgas Harbor	AK	X
27.	226	Petersburg	AK	X

TABLE 4

301(h) APPLICATIONS FROM TERRITORIAL POSSESSIONS

	APP#	NAME	STATE	REGION
1.	5	St. Thomas	V.I.	II
2.	28	Arecibo Regional	PR	II
3.	29	Aquadilla	PR	II
4.	30	Barceloneta	PR	II
5.	31	Bayamon	PR	II
6.	32	Carolina	PR	II
7.	33	Dorado	PR	II
8.	34	Fajardo	PR	II
9.	35	Guayama	PR	II
10.	36	Guayanilla	PR	II
11.	37	Humacao	PR	II
12.	38	Mayaguez	PR	II
13.	39	Ponce	PR	II
14.	52	St. Croix	V.I.	II
15.	24	Dedeo	Guam	IX
16.	25	Agna	Guam	IX
17.	88	Kolonia	TT	IX
18.	89	Tofol	TT	IX
9.	90	Ebeye	TT	IX
20.	91	Koror	TT	IX
21.	92	Majuro	TT	IX
22.	93	Lelu	TT	IX
23.	93.5	Tafunsak	TT	IX
24.	94	Utwe	TT	IX
25.	95	Malen	TT	IX
26.	96	Colonia	TT	IX
27.	97	Yap High School	TT	IX
28.	98	Moen High School	TT	IX
29.	215	Pago Pago	TT	IX
30.	216	Agingan Point	TT	IX
31.	217	Garapan	TT	IX

TABLE 5

301(h) APPLICATIONS FROM ALASKAN VILLAGES

1.	177	Goodnews Bay
2.	178	Portage Creek
3.	179	Port Heiden
4.	180	South Naknek
5.	182	Laser Bay
6.	183	Port Lions
7.	184	Hydaburg
8.	185	Saxman
9.	186	Port Graham
10.	187	English Bay
11.	188	Kake
12.	189	Angoon
13.	191	Karluk
14.	192	Akliok
15.	195	Old Harbor
16.	196	Chignik
17.	197	Nikolski
18.	198	Nelson Lagoon
19.	199	Akutan
20.	200	False Pass
21.	124	Anaktuvak
22.	125	Point Hope
23.	126	Point Lay
24.	127	Wainwright
25.	128	Atkasook
26.	129	Barrow
27.	130	Kaktovik
28.	131	Nuiqsut
29.	136	Brevig Mission
30.	137	Shaktoolik
31.	138	Kivalina
32.	139	Koyuk
33.	140	Shishmaref
34.	141	Teller
35.	142	Deering
36.	143	Gambell
37.	144	Savoonga
38.	145	St. Michael
39.	146	Stebbins
40.	147	Little Diomede
41.	148	Perryville
42.	149	Naknek
43.	150	Ivanoff Bay
44.	151	Ekuk
45.	152	Egegik

46.	153	Clarks Point
47.	154	Chignik Lagoon
48.	155	Yakutat
49.	156	Klawock
50.	157	Mekoryuk
51.	158	Toksook Bay
52.	159	King Cove
53.	160	Togiak
54.	161	Pilot Point
55.	162	Elim
56.	163	Sand Point
57.	164	Ouzinkie
58.	165	Unalakleet
59.	166	Hoonah
60.	167	Wales
61.	168	Golovin
62.	169	Kasaan
63.	170	Togiak
64.	171	Kipnuck
65	172	Kongiganak
66.	173	Tonunak
67.	174	Quinhagak
68.	175	Platinum
69.	176	Kwigillingok

TABLE 6

301(h) APPLICATIONS FROM FEDERAL FACILITIES

	APP#	NAME	STATE	REGION
1.	121	Navy Public Works	HI	IX
2.	122	Midway Naval Station	HI	IX
3.	60	Elmendorf AFB	AK	X
4.	61	Skemya AFB	AK	X
5.	181	Atka	AK	X
6.	194	St. George	AK	X

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TABLE 7

301(h) ELIGIBLE APPLICANTS WITH INDUSTRIAL CONTRIBUTION TO POTW

	APP#	NAME	%INDUST. CONT.	STATE	REGION
1.	44	Mass. Metro Dist.	(15)	MA	I
2.	53	South Essex	(39)	MA	I
3.	78	Groton	(60)	CT	I
4.	84	Lynn	(12)	Mass.	I
5.	101	Newport	(.05)	RI	I
6.	205	Fall River	(23)	MA	I
7.	206	Gloucester	(30)	MA	I
8.	16	Newtown Creek	(7)	NY	II
9.	17	Owls Head	(1)	NY	II
10.	18	Coney Island	(0.5)	NY	II
11.	19	North River	(1)	NY	II
12.	20	Red Hook	(1.5)	NY	II
13.	28	Arecibo Regional	(22)	PR	II
14.	29	Aquadilla	(6)	PR	II
15.	30	Barceloneta	(50)	PR	II
16.	31	Bayamon	(6)	PR	II
17.	38	Mayaguez	(7)	PR	II
18.	39	Ponce	(6)	PR	II
19.	112	Oakwood Beach	(0.01)	NY	II
20.	113	Port Richmond	(5)	NY	II
21.	202	Lamberts Point	(25)	VA	III
22.	104	North District	(10)	VA	III
23.	4*	Sand Island	(?)	HI	IX
24.	6*	Waianae	(?)	HI	IX
25.	7*	Kailua-Kaneohe	(?)	HI	IX
26.	4	Ventura Regional City	(17)	CA	IX
27.	22	Goleta	(2)	CA	IX
28.	41	Morro Bay	(?)	CA	IX
29.	56	San Diego	(9)	CA	IX
30.	57	Santa Cruz	(20)	CA	IX
31.	59	Orange County	(21)	CA	IX
32.	62	Los Angeles Co.	(25-30)	CA	IX
33.	63	SW Plant (S.F.)	(7)	CA	IX
34.	64	SE Plant (S.F.)	(6.9)	CA	IX
35.	65*	Richmond-Sunset (S.F.)	(?)	CA	IX
36.	66	Watsonville	(47)	CA	IX
37.	74	Encina WPCF	(10)	CA	IX
38.	77	Hyperion STP (L.A.)	(10)	CA	IX
39.	102	Hilo	(1.0)	HI	IX
40.	213	East Bay Mun. Util. Dist.	(20)	CA	IX
41.	215	Pago-Pago	(5)	T.T.Samoa	IX

	APP#	NAME	% INDUST. CONT.	STATE	REGION
42.	46*	Seldovia	(?)	AK	X
43.	71	Lynnwood	(5)	WA	X
44.	81	Tacoma (1)	(25)	WA	X
45.	85	Manchester	(1.5)	WA	X
46.	114	Richmond Beach	(20)	WA	X
47.	115	Carkeek Park	(20)	WA	X
48.	116	West Point	(20)	WA	X
49.	117	Alki	(20)	WA	X
50.	133	Bellingham	(40)	WA	X
51.	201	Whittier	(10)	AK	X
52.	208*	Southwestern SSD	(?)	WA	X
53.	14	Port Angeles	(0.7)	WA	X
54.	135	Seward	(66)	AK	X

* No specific information provided

VIII

ESTIMATE OF POTENTIAL TOTAL CONSTRUCTION FUNDS
IMPACTED BY 301(h) DECISIONS*

	Total POTWs Likely to Submit Completed 301(h) Applications	Estimated Potential Total Const. Cost of Achieving Secondary Treatment***
West Coast		
California	17	$1,178,421,000
Hawaii & Pacific Islands	6	186,977,000
Washington	28	263,671,000
Alaska	9	202,085,000
	60	$1,831,154,000
East Coast		
Maine	3	11,873,000
Rhode Island	1	19,836,000
Massachusetts	7	552,511,000
Connecticut	1	8,228,000
New York**	8	1,976,483,000
Puerto Rico	6	145,441,000
Delaware	2	765,000
Virginia	2	53,818,000
	30	2,768,955,000
Totals	90	$4,600,109,000

* Data source = 1978 Needs Survey

** Our current understanding is that the N.Y. DEP requires secondary treatment for discharge into ocean and saline estuarine waters and it is still uncertain whether this State requirement will be changed to allow NYC dischargers to submit 301(h) applications

*** "Potential Total Cost of Achieving Secondary Treatment" are the capital costs (Federal, State and local funds) for secondary treatment facilities; the dollar amounts indicate the estimated total cost for secondary treatment for these facilities including projected future funds, but do not include funds to cover long-term expansion of facilities.

ESTIMATED COSTS TO COMPLY
WITH MONITORING REQUIREMENTS

Section 125.63

Estimated costs to implement the proposed monitoring program on a 5-year basis. Costs will vary substantially as a function of number of toxic substances in effluent, the number of stations, and the frequency of sampling.

1) Field studies of health, structure, and function of biological communties as affected by discharge

*NOTE: All costs are on a one year basis

Personnel

Research ecologist - full time	30,000
Biological technicial - half time	10,000

Equipment and materials

Research vessel @ $300/day	6,000
Sampling equipment	2,000
	48,000

Indirect costs

Overhead (secretarial, maintenance, technical writing, etc) 100%	48,000
Subtotal	$96,000*

*(quarterly sampling, stations, duplicate samples)

2) In situ bioassays with caged organisms*

Personnel

Biological technicial - half time	10,000
Senior biologist - 1/4 time	7,000
Chemist half time	12,500

Equipment and materials

Research vessel (shared partly with above)	3,000
Cages and organisms	4,000
laboratory disposables	1,000
Indirect Costs 100%	37,500

*quarterly tests, 3 locations, 2 stations, in duplicate

subtotal $75,000

3) Studies of discharge effects on nearby fishery resources (assuming monthly surveys)

Personnel

Senior Biologist - half time	14,000
Asst. Biologist - full time	12,000
Microbiologist/Parasitologist - full time	22,000
Equipment and materials	
Ship-time (shared basis with 1 and 2)	1,000
laboratory disposables	10,000
	59,000
Indirect Costs 100%	
(including computer services)	59,000

Subtotal $118,000

4) Studies on biological effects of sediments heavily contaminated with toxic substances including pesticides

Personnel

Senior biologist - 1/4 time	7,000
Chemist - half time	12,500
Physical Science (geology) technicial - full time	15,000
Biological aide - full time	10,000
Equipment and materials	
Laboratory disposables	3,000
Ship time (shared)	-0
	47,500
Indirect Costs	
(includes analytical equipment depreciation, etc.)	47,500

Subtotal $95,000

5) Water Quality Monitoring Programs (monthly)

Personnel	
Chemist (full-time)	20,000
Chemical technician - half time	8,000
Equipment and materials	
Laboratory disposables	1,000
	29,000
Indirect costs (100%)	29,000
Subtotal	$58,000

6) Chemical analyses of toxics control program (monthly)

Personnel	
Chemist - full time	25,000
Chemical technician - half time	8,000
Equipment and materials	
Laboratory disposables	6,000
	39,000
Indirect costs (100%)	39,000
Subtotal	$78,000

PERSONNEL REQUIREMENTS

	Major dischargers	Minor dischargers
Research ecologist	1	1/2
Biological technician/aide	2	1
Senior biologist	1	1
Chemists	3	1
Asst. Biologist	1	-
Microbiologist/parasitologest	1	-
Physical Science technician	1	1
Chemical technician	1	1
	11	5 1/2

SUMMARY:

TOTAL COSTS

1) 96K

2) 75K

3) 118K

4) 95K

5) 58K

6) 78K

520K / per annum of $2.6 million for

5-year period as most reasonable cost for a major discharger (i.e. POTW serving 25MGD)

Major discharger = 520K per annum

Minor discharger

1) 46K

2) 37K

3) 25K

4) 10K

5) 20K

6) 25K

163K p/a or $0.815 million

for 5-year period as most reasonable cost for a minor discharger (medium-sized city of 50,000)

IX

WORKLOAD ANALYSIS: SECTION 301(h) MODIFIED PERMIT APPLICATION REVIEW AND PERMIT ISSUANCE(FY80).

RESOURCE NEEDS

Region	Number of Expected Applications	Application Review(WY)	N.A.I.L.(WY) a/	Permit Issuance(WY)	Compliance Monitoring & Enforcement(WY) b/
I	12	12.2	3.0	1.0	1.89
II	13	20.1	3.0	1.0	2.12
III	4	3.8	1.0	0.1	0.37
IX	23	26.6	5.0	1.5	3.70 c/
X	38	30.2	7.5	2.0	6.01
totals	90	92.9	19.5	5.6	14.09

RESOURCES AVAILABLE

Headquarters	8	-	-	-
Regions	6	-	4 d/	4.02
R&D(Corvallis)	6	-	-	-
NOAA	13 e/	-	-	-
Contract f/	42	-	-	-
totals	75.0	0.0	4.0	4.02
RESOURCE SHORTFALL	17.9	19.5	1.6	10.07

a/ These resource needs are based on the assumption that half of the eligible applicants' permits will require complete N.A.I.L. proceedings.

b/ Resource needs for compliance monitoring and enforcement will not be realized until after section 301(h) modified permits are issued.

c/ This figure includes resources to cover compliance sampling, inspection for toxics and biomonitoring in Region IX. Region IX contracts out the lab analysis part of inspection activities, thus resources for

compliance, monitoring and enforcement are in the form of contract dollars. The resource needs figure for Region IX can be reduced by as much as 50 percent if available contract dollars are counted, as well as positions. The net effect is to reduce the resource shortfall under this column.

d/ These resources would be used to reissue the permits whether a modification is granted or not.

e/ Interagency agreement between EPA and NOAA will expire at the end of FY79. These estimates assume this agreement will be extended through FY80.

f/ $1.25 million budgeted for expenditure in FY79; $0.85 million in FY80. Contract monies can only be used to offset the review of 301(h) applications, not permit issuance or N.A.I.L. proceedings.

EXHIBIT 9

Notice: This opinion is subject to formal revision before publication in the Federal Reporter or U.S.App.D.C. Reports. Users are requested to notify the Clerk of any formal errors in order that corrections may be made before the bound volumes go to press.

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 79-1639

NATURAL RESOURCES DEFENSE COUNCIL, INC., PETITIONER

v.

U.S. ENVIRONMENTAL PROTECTION AGENCY

and

DOUGLAS M. COSTLE, ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY, RESPONDENTS

CITY OF SKAGWAY, Marina County Water District, City of Wrangell, Alaska, INTERVENORS

No. 79-1934

PACIFIC LEGAL FOUNDATION, a nonprofit California Corporation, PETITIONER

v.

DOUGLAS M. COSTLE, in his official capacity as Administrator of the United States Environmental Protection Agency, RESPONDENT

Bills of costs must be filed within 14 days after entry of judgment. The court looks with disfavor upon motions to file bills of costs out of time.

No. 79-1935

CITY OF SKAGWAY, a municipality, and Marina County Water District, a public agency, PETITIONERS

v.

DOUGLAS M. COSTLE, in his official capacity as Administrator of the United States Environmental Protection Agency, and U.S. Environmental Protection Agency, RESPONDENTS

No. 79-2360

THE MUNICIPALITY OF ANCHORAGE, ALASKA, PETITIONER

v.

DOUGLAS M. COSTLE, in his official capacity as Administrator of Environmental Protection Agency, and U.S. Environmental Protection Agency, RESPONDENTS

Petitions for Review of Orders of the Environmental Protection Agency

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Argued October 23, 1980

Decided May 7, 1981

Stephen H. Schroeder, with whom *Ronald J. Wilson* was on the brief for petitioner Natural Resources Defense Council, Inc., in No. 79-1639.

Robert K. Best, with whom *Robert A. Zumbrun*, *David M. Shell*, *Raymond M. Momboisse* and *Eileen B. White* were on the brief for petitioners in Nos. 79-1934 and 79-1935, and intervenors, Marina County Water District, et al. in No. 79-1639.

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Lee C. White, with whom *Robert J. Saner, II* and *John McElroy Atkisson* were on the brief for petitioner Municipality of Anchorage, Alaska in No. 79-2360.

Nancy S. Bryson, Attorney, Department of Justice and *Bethami Averbach*, Attorney, Environmental Protection Agency of the bar of the District of Columbia Court of Appeals pro hac vice by special leave of Court with whom *James W. Moorman*, Assistant Attorney General, *Angus MacBeth*, Deputy Assistant Attorney General, *Donald W. Stever, Jr.*, Attorneys, Department of Justice were on the brief for respondents. *John Hammock* and *Joan M. Cloonan*, Attorneys, Department of Justice also entered appearances for respondents.

Before: LUMBARD*, *Senior Circuit Judge* for the United States Court of Appeals for the Second Circuit; ROBB and GINSBURG, *Circuit Judges*

Opinion for the Court filed by *Circuit Judge* ROBB.

ROBB, *Circuit Judge*: In this case the petitioners challenge regulations promulgated by the Administrator of the Environmental Protection Agency (EPA) to implement section 1311(h), 33 U.S.C. § 1311(h) (Supp. II 1978), of the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.* (1976) (the Act). Section 1311(b)(1)(B) of the Act required municipal sewage plants to achieve a minimum sewage treatment standard by 1977, 33 U.S.C. § 1311(b)(1)(B) (1976); *Montgomery Environmental Coalition v. Costle*, No. 79-1183 (D.C. Cir., Oct. 8, 1980), slip op. at 7. Section 1311(h), a 1977 amendment, allows municipalities to apply for a variance from the minimum standard of section 1311(b), 33 U.S.C. § 1311(h) (Supp. II 1978). The challenged regulations provide the standards for section 1311(h) variances.

On June 22, 1979 the Natural Resources Defense Council (NRDC) filed in this court a petition for review of

* Sitting by designation pursuant to 28 U.S.C. § 294(d).

the regulations. Later in June the Pacific Legal Foundation, the City of Skagway, Alaska, and the Marina County, California Water District (collectively referred to as PLF) filed petitions for review in the Ninth Circuit. The City of Wrangell, Alaska moved to intervene in the PLF action on August 24, 1979. On September 12, 1979, by motion of PLF, this court entered an order staying the final application deadline pending review of regulations. Anchorage, Alaska filed a petition for review of the regulations in the Ninth Circuit on September 19, 1979. Subsequently, the Ninth Circuit transferred the PLF, Wrangell and Anchorage petitions to this court and we consolidated the petitions on January 2, 1980.

NRDC argues that the Administrator has misinterpreted the law to provide too great an opportunity for variance applications. PLF and Anchorage argue that the regulations are too restrictive and impracticable. We conclude that but for two exceptions, the regulations faithfully implement the mandate of the statute.

BACKGROUND

The discharge of sewage into a body of water may create severe environmental damage. The decomposition of organic matter consumes oxygen, and excessive oxygen demands may deprive fish, shellfish and aquatic wildlife of dissolved oxygen necessary to life. Solid matter from sewage may settle in layers on the floor of the water body and suffocate life forms that cannot escape. Acids and heavy metals may poison the water. In short, unrestricted discharges of sewage can cause environmental damage which in turn will affect the nation's health and welfare. The legacy of unrestricted sewage discharge is disease, reduced fishery and recreation resources, poisoned water supplies and ugly water bodies. *See*

Council on Environmental Quality, *Environmental Quality: First Annual Report*, 29-42 (1970).

In 1972 Congress reacted to the continuing decline of our nation's waters by passing the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972). The objective of the 1972 Act is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (1976). An interim goal of fishable, swimmable waters was set for July 1, 1983. 33 U.S.C. § 1251 (a)(2) (1976). The ultimate goal of eliminating the discharge of pollutants into the nation's navigable waters was set for 1985. 33 U.S.C. § 1251(a)(1) (1976).

In order to achieve these goals restrictions were imposed on individual polluters by means of a permit system administered by EPA.[1] The statute made it unlawful to discharge a pollutant without a permit. 33 U.S.C. § 1311(a) (1976). The Administrator of the EPA (Administrator) issues a permit only if the applicant meets the criteria set out in the Act. 33 U.S.C. § 1342(a)(1) (1976).

One of the requirements of the 1972 Act was that publicly owned treatment works[2] in existence on July 1, 1977 at least meet effluent standards based on secondary

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[1] The applicant for a permit must obtain a permit from a state agency if such an agency has been set up and approved under the Federal Water Pollution Control Act, 33 U.S.C. §§ 1311(a), 1342(a)&(b) (1976 & Supp. II 1978). *See* EPA v. State Water Resources Control Board, 426 U.S. 200, 208 (1976).

[2] "Publicly owned treatment works" are defined in 33 U.S.C. § 1292(2) (1976 & Supp. II 1978). This definition is incorporated in the regulations at issue in this case, 40 C.F.R. § 125.58(p) (1980).

treatment of sewage.[3] 33 U.S.C. § 1311(b)(1)(B) (1976). Although some treatment works met the deadline, thousands failed to achieve secondary treatment by July 1, 1977. *See* 3 A LEGISLATIVE HISTORY OF THE CLEAN WATER ACT OF 1977, 95th Cong., 2d Sess., Ser. No. 95-14, 450-51 (Remarks of Sen. Muskie) (1978) (hereinafter cited as Leg. Hist.); Note, *The Clean Water Act of 1977—Modifications of the Municipal Program*, 2 Harv. Envt'l L.Rev. 127, 129 (1977). The principal reason for this failure was the unavailability of federal construction funds due to a Presidential impoundment. *See* Note, *Highlights of the Clean Water Act of 1977*, 8 Envt'l Law. 869, 873 (1978).

The uniform requirement of secondary treatment of sewage by publicly owned treatment works was criticized by some cities as being unnecessary to full protection of the environment. For example, a representative of the city of Seattle testified before a Senate Subcommittee that the uniform secondary treatment requirement is an unnecessary burden on taxpayers because the treatment is not necessary to assure compliance with water quality standards in Puget Sound, *Hearing Before the Subcommittee on Environmental Pollution of the Committee on Environment and Public Works of the United States Senate*, 95th Cong., 1st Sess., Ser. No. 95-H25, Pt. 3, 60-63 (1977) (hereinafter cited as *Senate Subcommittee Hearings*). The city of Port Angeles, Washington argued that the characteristics of the water body into

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[3] The regulations here at issue define "secondary treatment" in terms of biochemical oxygen demand, suspended solids, and pH. Secondary treatment achieves certain minimum levels of removal which result in less potential damage to the receiving waters. *See* 40 C.F.R. §§ 125.58(r), 133.102 (1980). Primary treatment is "the first stage of wastewater treatment where substantially all floating or settleable solids are removed by flotation and/or sedimentation". 40 C.F.R. § 125.58(m) (1980).

which the city discharged reduced the value of secondary treatment of sewage for its discharge. *Senate Subcommittee Hearings* at 352-55. Anchorage, Alaska informed the Subcommittee that Cook Inlet, into which its three sewage plants discharge, has tidal ranges in excess of 30 feet. The Inlet is fed by over 620 million gallons of water per day from freshwater streams. The rapid dilution of the discharge under such conditions renders secondary treatment unnecessary, according to Anchorage. *Senate Subcommittee Hearings*, Part 8, at 269-71.

In 1977 Congress responded to such assertions by amending the Federal Water Pollution Control Act to provide for a variance from the secondary treatment requirement for treatment plants that can meet certain conditions. *See* 3 LEG. HIST. at 320-23. Congress expressed a desire to avoid "treatment for treatment's sake". *Id.* at 320. The full text of that provision is:

> The Administrator, with the concurrence of the State, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant in an existing discharge from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that—
>
> (1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 1314(a)(6) of this title;
>
> (2) such modified requirements will not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(7) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(8) any funds available to the owner of such treatment works under subchapter II of this chapter will be used to achieve the degree of effluent reduction required by section 1281(b) and (g)(2)(A) of this title or to carry out the requirements of this subsection.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 1251(a)(2) of this title.

33 U.S.C. § 1311(h) (Supp. II 1978). This section was added to the Act as part of the Clean Water Act of 1977, Pub. L. No. 95-217, § 44, 91 Stat. 1566 (1977). This opinion refers to this section as section 1311(h) and the Clean Water Act of 1977 as the 1977 Amendments.

A comparison of 33 U.S.C. § 1311(b)(1)(B) (a 1972 provision) with section 1311(h) (a 1977 provision) of the same title reveals a change in focus in the regulatory scheme. Subsection (b) of section 1311, the earlier provision, deals with minimal levels of technology which must be achieved by treatment plants by certain dates. Subsection (h) of the 1977 Amendments concentrates on the impact of the discharge on the water quality of the receiving water body. The difference is important and is the root of much of the controversy in this case.

The 1972 Amendments to the Federal Water Pollution Control Act drastically altered the federal approach to water pollution. The emphasis on maximum tolerable pollution in the waters was abolished, and in its place was substituted a permit system imposing direct restrictions on each source of pollution. *See EPA v. State Water Resources Control Board*, 426 U.S. 200, 202-05 (1976). The 1977 addition of section 1311(h) reflects a return, at least in part, to regulation of pollution by means of scrutiny of the impact of the polluter's discharge on the receiving waters. This is most clearly reflected in the language of section 1311(h)(2).

Congress recognized this change in regulatory approach and provided a 270-day period for applications under the new law. 33 U.S.C. § 1311(j)(1)(A) (Supp. II 1978). The effective date of the Clean Water Act Amendments of 1977 is December 27, 1977; however the Agency did not propose regulations under section 1311(h) until April 25, 1978. 43 FED. REG. 17484

(1978). The proposed regulations were the subject of many comments.

The Agency failed to promulgate final regulations in time to allow applicants to file final applications within the 270-day period fixed by the Act. On September 5, 1978 the Agency announced that it would accept preliminary applications until the statutory deadline, September 24, 1978. Final applications would be accepted after the final regulations issued. 43 FED. REG. 39398-99 (1978). The final regulations were issued on June 15, 1979. 44 FED. REG. 34784 (1979). The final deadline for application was set 90 days later. On September 12, 1979 this court stayed the final application deadline, pending review.

STANDARD OF REVIEW

The role of this court in reviewing the propriety of regulations issued under the Clean Water Act is narrow. The regulations may be set aside only if they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . ." 5 U.S.C. § 706(2)(A) (1976). The agency charged with administering the Act is entitled to deference in its construction of the Act's terms and requirements. *EPA v. Nat'l Crushed Stone Ass'n*, —— U.S. ——, 101 S. Ct. 295, 307 (1980).

However, this court will not act as a rubber stamp. The Agency must follow the established rules of statutory construction. *Weyerhauser Co. v. Costle*, 191 U.S. App. D.C. 309, 325, 590 F.2d 1011, 1027 (1978). Our duty is to see that the congressional mandate is carried out, and misinterpretation of that mandate will be corrected. *Ass'n of American Railroads v. Costle*, 183 U.S. App. D.C. 362, 370-71, 562 F.2d 1310, 1318-19 (1977).

The issues presented by this case are to a great extent issues of statutory construction. Where the Administrator's interpretation of the Act coincides with the purpose

and intent of the statute we defer to his construction. Where the issue presented involves questions of scientific expertise or a choice between reasonable interpretations of the statute we defer to the Administrator's interpretation; however no amount of deference can justify an interpretation of the statute that is contrary to law.

THE REGULATIONS

The regulations at issue are found at 40 C.F.R. §§ 125.56—.67 (1980). The regulations establish "the criteria and standards to be applied by EPA in acting on section 301(h) [1311(h)] requests for modifications to the secondary treatment requirements." Section 125.56. The regulations define various terms of importance to applicants seeking to discharge without secondary treatment. Section 125.58. Section 125.59 establishes the general application requirements and contains prohibitions on the issuance of permits for certain types of discharges. This section is attacked as being too permissive on the one hand and too restrictive on the other. Section 125.61 lists the standards for maintenance of water quality near the proposed discharge. It also explains the permit application requirements for a discharge meeting such standards. Section 125.62 sets out the standards for monitoring the impact of the discharge on the receiving waters and requires that each applicant show how its monitoring program will operate. Section 125.64 requires that the applicant for a discharge permit show the sources and means of practical control of toxic matter in its discharge. This regulation is criticized as being both woefully inadequate and impracticable.

The regulations will be more fully discussed as each issue is dealt with in the balance of this opinion.

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JURISDICTION TO REVIEW THE REGULATIONS

The Act provides that

> Review of the Administrator's action . . . in approving or promulgating any effluent limitation or other limitation under section 1311 . . . may be had by any interested person in the Circuit Court of Appeals of the United States . . . upon application by such person. . . .

33 U.S.C. § 1369(b) (1976). PLF argues that this court does not have jurisdiction to review the challenged regulations because the regulations are not "effluent limitation[s] or other limitation[s] under section 1311", within the meaning of this section.

The Act defines "effluent limitations" as

> any restriction established . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constitutents which are discharged from point sources . . . .

33 U.S.C. § 1362(11) (1976). PLF argues that the regulations implementing section 1311(h) do not restrict sewage discharges, but are intended to allow more discharge of sewage into the waters; therefore, says PLF, the regulations are not effluent limitations, and this court does not have jurisdiction to review them.

The regulations which implement section 1311(h) are "effluent limitations . . . under section 1311", as required by section 1369(b). It is true that the regulations allow municipalities to apply for a variance from the normal requirement of secondary sewage treatment; however the regulations do not allow all municipalities to apply for the section 1311(h) permit. As a practical matter they restrict the discharge of sewage by limiting the availability of a variance to a class of applicants which does not include all coastal municipalities. PLF itself argues that the regulations by tending to restrict the availability

of a section 1311(h) permit require more treatment of sewage. We think the regulations are "effluent limitations . . . under section 1311."

We note also that section 1311(h) provides that a permit granted pursuant to that section shall be issued "under section 1342". A permit issued under section 1342 is reviewable in a court of appeals under section 1369(b)(1)(F).[4] If we hold that the regulations here are not reviewable in a court of appeals the "perverse situation" to which the Supreme Court referred in *E.I. duPont de Nemours & Co. v. Train*, 430 U.S. 112, 136 (1977), will be created: we will be able to review the grant or denial of the permit, but will be without authority to review directly the regulations on which the permit is based.

PLF relies on *American Iron & Steel Institute v. EPA*, 543 F.2d 521 (3d Cir. 1976) to support its argument that this court is without jurisdiction. In that case the court dismissed petitions for review of regulations which did "no more than prescribe the policy and procedures to be followed in connection with applications for permits." 543 F.2d at 526. The court concluded that the regulations were not "effluent limitations" under section 1369(b)(1)(E) because they did not "prescribe specific number limitations for any pollutant [or] . . . list the factors which must be considered in determining the control measures which individual point sources must employ"; further, the regulations did not alter the basic effluent limitation which they amended. 543 F.2d at 527.

We are not persuaded by the analysis in *American Iron*. Moreover, that case is distinguishable from the one before us on several grounds. First, the case was decided

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[4] Review of the Administrator's action . . . (F) in issuing or denying any permit under section 1342 . . ., may be had by any interested person in the Circuit Court of Appeals of the United States . . . .

33 U.S.C. § 1369(b)(1)(F) (1976).

prior to *Crown Simpson Pulp Co. v. Costle*, 445 U.S. 193 (1980), in which the Supreme Court, while reserving judgment on review under section 1369(b)(1)(E), reversed a ruling based on a narrow interpretation of section 1369(b)(1). In reversing the circuit court of appeals, the Court emphasized the practical impact of the decision rather than a literal reading of the statute.

Second, the regulations challenged here would in practice limit the discharge of sewage by limiting the availability of a section 1311(h) permit. Third, while the regulations do not contain specific number limitations in all cases, their purpose is to prescribe in technical terms what the Agency will require of section 1311(h) permit applicants. These facts are sufficient to distinguish the regulations in this case from the regulations challenged in the *American Iron* case.

We conclude that the challenged regulations amount to "effluent limitations" within the meaning of section 1369(b)(1)(E). This court has jurisdiction to review them.

ELIGIBILITY TO APPLY FOR A SECTION 1311(h) VARIANCE

In promulgating section 125.59 of the regulations the Administrator included a list of nine "prohibitions" on issuance of a permit under section 1311(h), 40 C.F.R. § 125.59(b)(1)-(9) (1980). The effect of the prohibitions is to render certain treatment plants ineligible for section 1311(h) variances. Similarly, the failure of the Administrator to include certain prohibitions opens the application process to cities that, according to NRDC, are not legally eligible to apply under the Act. We discuss each of the eligibility issues separately.

West Coast Limitation

NRDC argues that section 1311(h) applies only to dischargers located on the west coast and island jurisdictions such as Hawaii, Puerto Rico, and the Virgin

Islands. According to NRDC, cities located on the east coast are not eligible to apply for a variance and the Administrator has erred in not restricting permit eligibility to the west coast and island jurisdictions. (Br. for NRDC at 47-52, Rep. Br. for NRDC at 27-28).

There is nothing in the language of section 1311(h) that limits the availability of a variance to west coast cities and certain islands. The declaration of goals and policies in 33 U.S.C. § 1251 expressly sets nationwide goals. The restrictions on dischargers in section 1311(b) are national in scope. Nevertheless, NRDC argues that in amending the Act in 1977 Congress intended to create a regional variance or exemption without expressly stating such an intent.

We are loath to imply a special application to a particular region of the country when Congress, composed of senators and representatives from every state in the Union, chose language of general application. It is enough to say that the statutory language is not ambiguous. In any case, an act which amends a statute of general application is also an act of general application. *See Unity v. Burrage*, 103 U.S. 447, 456 (1880). We therefore reject NRDC's restrictive construction of the statute in this respect.

Discharge of Substantial Amounts of Toxics

NRDC also argues that treatment plants whose discharges contain a "substantial" amount of toxics are not eligible to apply for section 1311(h) permits. NRDC does not base this argument on the language of section 1311(h), but insists that a toxics eligibility standard must be implied from the legislative history. (Br. for NRDC at 43-47, NRDC Rep. Br. at 29-33). We reject this argument.

Both the Administrator and NRDC agree that the discharge of "substantial" amounts of toxics[5] into the ocean is not permitted under section 1311(h). (Br. for NRDC at 43-45, Br. for EPA at 64, Rep. Br. for NRDC at 29). However, the Administrator contends that his regulation, section 125.64, imposes all the toxic controls required by section 1311(h).

The regulations specify the toxic controls which must be shown in an application for a section 1311(h) permit. An applicant must submit a chemical analysis of its discharge in order to identify toxics, section 125.64(a). The applicant must identify, to the extent practicable, the sources of the toxic pollutants in its discharge, section 125.64(b). Section 125.64(c) requires pretreatment programs to control the entry of toxics from industrial sources into the applicant's treatment system. Similar programs for the control of toxics from non-industrial sources are required under section 125.64(d). The applicant must also show that its discharge will meet the water quality standards of section 1311(h)(2). Under section 1311(h)(2) the discharge must not interfere with the maintenance of a balanced indigenous popula-

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[5] Neither the Administrator nor NRDC can define the term "substantial". Some guidance as to the substance of the controversy may be gleaned by reference to 33 U.S.C. § 1251(a)(3) (1976) which states that "it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited". "Toxic pollutant" is defined in 33 U.S.C. § 1362 (13) (1976) to mean "those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring."

tion of fish, shellfish, and wildlife—among other conditions.

These regulations are intended to implement fully the toxic control requirements of section 1311(h), and we think they do, but NRDC argues that there is a further requirement. Under its interpretation, only treatment plants that can show the absence of a "substantial" amount of toxics in the discharge may even apply for a permit.

No such eligibility restriction appears in section 1311 (h). NRDC cites legislative history illustrating congressional concern over the problems created by toxic discharges, *e.g.*, 3 LEG. HIST. 447-48 (Remarks of Sen. Muskie). We have no doubt that toxic pollutants are a subject of grave concern to the Congress. The fact remains however that although congressional concern over toxics led to some additional restrictions in section 1311 (h), *see e.g.*, 4 LEG. HIST. 1033-34 (Remarks of Sen. Gravel), the concern did not result in the prohibition sought by NRDC. We will not imply such a restriction under these circumstances.

Minimum Depth Requirement

NRDC argues that the Administrator has misinterpreted section 1311(h) by failing to promulgate a minimum depth standard on applications for permits under that section. We repeat the pertinent statutory language:

> The Administrator . . . may issue a permit . . with respect to the discharge of any pollutant in an existing discharge from a publicly owned treatment works into marine waters . . . [when certain facts are shown].
>
> For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territoria

> sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 1251(a)(2) of this title.

33 U.S.C. § 1311(h) (Supp. II 1978).

As the source of its argument NRDC points to the phrase "deep waters of the territorial sea or the waters of the contiguous zone" in the last sentence of the section.

"Territorial sea" is defined in the Act as

> the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

33 U.S.C. § 1362(8) (1976).

The contiguous zone referred to in the statute extends another twelve miles into the ocean.[6] Thus, it appears that the "deep waters" language refers to a fifteen mile wide belt of ocean. NRDC argues that the word "deep" adds an eligibility restriction which the Administrator has ignored.

Depth was a subject of concern to Congress in its consideration of section 1311(h). The statute itself uses the word "deep." The Conference Committee Report states that "[d]epth is a key factor in determining the

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[6] "Contiguous zone" is defined in 33 U.S.C. § 1362(9) (1976) by reference to the definition of the same term in the Convention of the Territorial Sea and the Contiguous Zone, 15 U.S.T. 1606, 1612-13, TIAS 5639, 516 UNTS 205 (1964). Article 24(2) of the Convention states that "[t]he contiguous zone may not extend beyond twelve miles from the baseline from which the breadth of the territorial sea is measured."

amount of circulation in waters of the territorial sea or contiguous zone." 3 LEG. HIST. at 259. NRDC cites several appearances of the expression "deep marine discharge", *e.g.*, 3 LEG. HIST. 257, or "deep marine outfalls", *e.g.*, 3 LEG. HIST. 320. NRDC also cites a letter from the Assistant Administrator for Water and Hazardous Materials stating that the Agency interprets section 1311 (h) to apply to ". . . outfalls into very deep waters . . .", 3 LEG. HIST. 449.

A citation to legislative history which mentions the word "deep" is not helpful in defining the content of the statutory term. It amounts to mere repetition. "Very deep" is no more helpful. The question remains, what is "deep"?

During the rulemaking proceeding the Administrator stated that the Agency is "unable to establish a scientifically defensible minimal depth limitation for inclusion in the final regulations." 44 FED. REG. 34802 (1979). The only depth figure mentioned in the legislative history is a statement in the Conference Committee Report that 200 feet is sometimes an inadequate depth to assure proper dispersion of the discharge. 3 LEG. HIST. 259. The Administrator concluded that a minimum depth standard of 200 feet "would automatically preclude all but approximately half a dozen ocean dischargers from even being considered for a modification". 44 FED. REG. 34802 (1979).

The Administrator did not ignore the statutory language. Under the final regulations the depth factor will be taken into account as part of the water quality standards of section 126.61. For example, if the outfall is so shallow as to interfere with swimming, diving and boating it will not meet the requirements of section 125.61 (d) (1) (i). If a discharge is located so that it interferes with migratory patterns it may run afoul of section 125.61(c) (1) (iii) (B). Sewer outfalls that are placed at

a depth where there is insufficient circulation to assure dilution will not meet the requirements of section 125.61 (a) (1) (iv). None of these regulations mentions depth as a specific requirement. Yet each of the regulations may function as a check on inadequate placement of outfalls, including inadequate depth. Under the scheme of the final regulations depth is a factor, but not a controlling factor.

We are convinced that the word "deep" in section 1311(h) does not refer to any uniform minimum depth in feet. Depth is not an independent controlling factor because it is but one factor which must be taken into account. The Agency must consider depth, but it must also consider offshore distance, geological characteristics, and tidal movements. 3 LEG. HIST. 259. The interpretation urged on the court by NRDC elevates depth to the status of a controlling factor. The Administrator's interpretation treats depth as one factor in the environmental calculus set up in section 1311(h). We hold that this is a reasonable and proper interpretation.

Existing, Current, and Improved Discharges

Section 1311(h) states that

> The Administrator . . . may issue a permit . . . with respect to the discharge of any pollutant in an *existing discharge* from a publicly owned treatment works into marine waters . . . .

33 U.S.C. § 1311(h) (Supp. II 1978) [emphasis added].

In publishing proposed rules under this section in April 1978 the Administrator interpreted "existing discharge" to mean "a discharge which was actually flowing into marine waters . . . on or prior to December 27, 1977" [the date of enactment]. 43 FED REG. 17494 (1978) (proposed rule 233.11(b)(2)). The proposed rules barred applications from treatment plants whose discharge had been altered since December 27, 1977. The

analysis which accompanied the proposed rules invited comments on this threshold disqualification. In particular, the Administrator requested comments on upgraded treatment methods, relocated sewage outfalls, and planned construction. If altered discharges were to be eligible, the Administrator requested comments on the possible difficulties in predicting the impact of the altered discharge on the environment. 43 FED. REG. 17487-88 (1978).

The proposed definition of "existing discharge" was the subject of numerous comments. Some commenters urged the Administrator to consider discharges only as of December 27, 1977. Others sought a less restrictive definition. 44 FED. REG. 34788 (1979).

In response to the comments the Administrator altered the regulations to allow permit applications based on either the "current discharge" or an "improved discharge."[7] A discharge that "was not actually flowing

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[7] 40 C.F.R. § 125.59(a) (1980) states that:

> A final application for modified section 301(h) permit under this subpart shall be based on either:
>
> (1) A current discharge into ocean waters or saline estuarine waters; or
>
> (2) An improved discharge into ocean waters or saline estuarine waters. *Provided,* That:
>
> (i) The applicant demonstrates in its final application that such improvements have been thoroughly planned and studied as an alternative to secondary treatment and that it can expeditiously complete or implement such improvements; and
>
> (ii) The applicant submits, as part of its final application, a proposed schedule for (A) the planning, design and staged construction of secondary treatment, and (B) such other improvements which will provide for the maximum amount of planning, design and con-

into [marine waters] as of December 27, 1977" may not form the basis for a permit. 40 C.F.R. § 125.59(b)(3) (1980).

NRDC contends that section 1311(h) cannot be interpreted to allow permits based on improved discharges. According to NRDC the legislative history conclusively establishes that the permits must be based only on discharges as they existed on December 27, 1977. (Br. for NRDC at 28-31) To support this contention NRDC cites several instances of the use of the term "existing deep marine discharge" or "existing deep marine outfalls" in the legislative history, *e.g.*, 3 LEG. HIST. 257, 320. As

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[7] [Continued]

struction which can be completed by the applicant pending a final decision on its application; and

(iii) The applicant has exercised its best efforts to comply with such schedule pending a final decision on its application.

Section 125.58 defines "current discharge" as "the volume, composition, and location of an applicant's discharge as of anytime between December 27, 1977 and (3 months after date of publication) as designated by the applicant." 40 C.F.R. § 125.58(d). "Improved discharge" is defined as

(f) "Improved discharge" means the volume, composition and location of an applicant's discharge following:

(1) Construction of planned outfall improvements, including, without limitation, outfall relocation, outfall rapair, or diffuser modification; or

(2) Construction of planned treatment system improvements; or

(3) Implementation of a planned program to improve operation and maintenance of an existing treatment system; or

(4) Implementation of a planned program to eliminate or control the introduction of pollutants into the applicant's treatment works.

40 C.F.R. § 125.58(f) (1980).

is the case with the depth argument, p. 19, *supra*, mere repetition of the statutory language sheds little light on its meaning.

It is clear that Congress did not wish to authorize section 1311(h) permits for non-existing discharges. This purpose is implemented in the final regulations by the requirement that the discharge must have been actually flowing into marine waters on December 27, 1977. *See* 40 C.F.R. § 125.59(b)(3) (1980). But what of changes that have occurred or are planned in discharges that existed on December 27, 1977?

Congress was silent on this subject. The proper approach under such circumstances is to interpret the statute in light of its purpose. *See Sea-Land Service, Inc. v. Kreps*, 185 U.S. App. D.C. 98, 108, 566 F.2d 763, 773 (1977). The purpose of section 1311(h) is to allow treatment plants that can discharge into marine waters and meet certain environmental standards to demonstrate those facts to the Agency and receive a permit. *See, e.g.*, 3 LEG. HIST. 257-59. Although fiscal concerns are not paramount under section 1311(h), Congress has determined to allow some savings in sewage treatment through harmless marine discharges. The overriding purpose of the Act is still the prevention of water pollution.[8]

This statutory purpose is served by allowing treatment plants that have planned improvements to apply for permits under section 1311(h). Treatment plants that made no effort to upgrade operations are eligible because their discharge still is as it existed in December 1977. By al-

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[8] The Supreme Court has recently held that similar provisions applying to point sources other than publicly owned treatment works must be complied with even if it means that some businesses will be forced to shut down. EPA v. Nat'l Crushed Stone Ass'n —— U.S. ——, 101 S. Ct. 295 (1980).

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lowing treatment plants to apply for permits based on improved discharges the Agency has encouraged upgraded operations and treatment savings while preserving the opportunity for such plants to apply for permits. This is consistent with the purpose of section 1311(h).

NRDC also argues that granting section 1311(h) permits for improved discharges necessarily requires unauthorized extensions of the July 1, 1977 deadline for achievement of secondary treatment, 33 U.S.C. § 1311 (b)(1)(B) (1976). (NRDC Br. at 32-36, NRDC Rep. Br. at 24-25) According to NRDC such extensions are unavoidable because applicants for "improved discharge" permits will need time beyond July 1, 1977 to complete improvements. NRDC contends that the Administrator has no authority to grant extensions to section 1311(h) applicants.

NRDC's argument is seriously flawed in two respects. First, it proves too much in that not only would improved discharges be ineligible for permits under section 1311 (h), but any applicant who was not in complete compliance with the secondary treatment requirement would be ineligible. If the Secretary has no authority to grant extensions to applicants who have not complied with the secondary treatment requirement, then only those applicants who have reached secondary treatment may apply to discharge sewage treated at a stage below secondary levels. There is no indication that Congress intended to restrict the availability of section 1311(h) to those municipalities which had expended tax dollars to build a plant capable of secondary treatment. Secondary treatment is to be avoided under section 1311(h), and it would make no sense to require a municipality to build a plant in order to apply for permission not to use it.

The second serious flaw in NRDC's argument is that it ignores the period of non-compliance assumed in the statute itself. Congress knew that thousands of munici-

palities had not met the July 1, 1977 deadline. *See* p. 6, *supra.* Congress authorized coastal municipalities to apply for section 1311(h) permits, and did not restrict the eligibility of municipalities not in compliance with the July 1, 1977 deadline. Congress itself recognized that non-complying municipalities would apply for section 1311(h) permits. *See, e.g.*, 3 LEG. HIST. 449-51, 535. Therefore a period of non-compliance was assumed for at least some section 1311(h) applicants. Under NRDC's interpretation no period of non-compliance can be allowed, yet Congress itself assumed such a period.

To the extent that municipal applicants are not in compliance with the July 1, 1977 deadline it is the responsibility of the municipalities, not the Administrator. The Administrator's regulations do not encourage non-compliance. Non-complying municipalities may apply for a variance, but the ultimate responsibility for statutory compliance rests on the municipal applicant. *See* 44 FED. REG. 34793 (1979). The statutory deadline is not extended unless an application is granted, a result clearly intended by Congress.

The Administrator's interpretation of the statute does not result in an impermissible extension of the July 1, 1977 deadline. The regulation which allows applications based on improved discharges does not involve any extension of the deadline which is not implicit in the statute. We conclude that all of the objections to the Administrator's interpretation of "existing discharge" are unavailing.

Untreated Sewage and Sludge

The final regulations prohibit the issuance of a permit under section 1311(h) for the discharge of sewage receiving less than primary treatment or for the discharge of sludge. 40 C.F.R. § 125.59(b)(4)&(5) (1980).

The Pacific Legal Foundation argues that these prohibitions embody a misinterpretation of the statute. Pri-

mary treatment is "the first stage in wastewater treatment where substantially all floating or settleable solids are removed by flotation and/or sedimentation." 40 C.F.R. § 125.58(m) (1980). Sludge is solid material that is removed from sewage during treatment. *Costle v. Pacific Legal Foundation*, 445 U.S. 198, 201 (1980).

Section 1311(h) states that:

> The Administrator . . . may issue a permit . . . with respect to the discharge of *any pollutant* in an existing discharge . . . .

33 U.S.C. § 1311(h) (Supp. II 1978) [emphasis added]. The Act defines "pollutant" to include both "sewage" and "sewage sludge", 33 U.S.C. § 1362(6) (1976). The definition of "pollutant" in section 1362(6) was part of the 1972 Act. *See* Pub. L. No. 92-500, § 502, 86 Stat. 816 (1972). Section 1311(h), added in 1977, contains no special definition of "pollutant". Because an amended act should be read as a whole, *see United States v. La Franca*, 282 U.S. 568, 575-76 (1931), the definition of pollutant in section 1362(6) applies to the use of the same term in section 1311(h). It is as if the amendment was part of the original act. *See Blair v. Chicago*, 201 U.S. 400, 475 (1906). On its face, therefore, section 1311(h) authorizes the issuance of a permit to discharge sewage or sludge if the applicant can meet the other conditions of the section.

The Administrator attempts to avoid the plain meaning of the statute by means of legislative history and policy arguments. Upon close inspection, however, the legislative history does not support the Administrator's position. The practical result of a literal interpretation of the statute is not absurd or futile. For this reason the policy arguments are insufficient to contradict the language chosen by Congress.

The Administrator relies on a statement by the Senate sponsor of the bill which became section 1311(h) to the effect that the bill would create a narrow exception to the uniform secondary treatment requirement of the Act. 3 LEG. HIST. at 428. The Administrator also states that nothing in the legislative history of the 1977 amendments affirmatively supports the discharge of untreated sewage or sludge. (EPA Br. at 49) Neither of these arguments can change the language of the statute and this court cannot ignore that language. Legislative silence is not a reliable indicator of congressional intent. *See NLRB v. Plasterer's Union*, 404 U.S. 116, 129-30 (1971).

The Administrator also points to section 1412a of the Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. § 1401 *et seq.* (1976 & Supp. II 1978), to justify his interpretation of section 1311(h) of the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977.* Section 1412a provides that:

> (a) The Administrator of the Environmental Protection Agency (hereinafter referred to in this section as the "Administrator") shall end the dumping of sewage sludge into ocean waters, or into waters described in section 1411(b) of this title, as soon as possible after November 4, 1977, but in no case may the Administrator issue any permit, or any renewal thereof (under Title I of the Marine Protection,

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* Section 1412a was added to the Marine Protection Act by the same Congress that added section 1311(h) to the Federal Water Pollution Control Act. *See* Pub. L. No. 95-153, § 4, 91 Stat. 1255 (1977) and Pub. L. No. 95-217, § 44, 91 Stat. 1566 (1977). Contemporaneous acts dealing with the same subject matter are construed harmoniously. *See* Bigelow v. Forrest, 76 U.S. (9 Wall.) 339, 350 (1869); Pacific Legal Foundation v. Quarles, 440 F. Supp. 316, 327 (C.D. Calif. 1977) *aff'd* sub nom. Kilroy v. Quarles, 614 F.2d 225 (9th Cir.), *cert. denied*, —— U.S. ——, 101 S. Ct. 88 (1980).

> Research, and Sanctuaries Act of 1972) which authorizes any such dumping after December 31, 1981.
>
> (b) For purposes of this section, the term "sewage sludge" means any solid, semisolid, or liquid waste generated by a municipal wastewater treatment plant the ocean dumping of which may unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological systems, or economic potentialities.

33 U.S.C. § 1412a (Supp. II 1978).

The Marine Protection Act sets up a permit system to regulate the dumping of pollutants into the ocean from vessels, 33 U.S.C. §§ 1411, 1412 (1976), but does not govern the discharge of pollutants from sewer outfalls. This is evident from the definition of "dumping" in 33 U.S.C. § 1402(f) (1976), which excludes "a disposition of any effluent from any outfall structure to the extent that such disposition is regulated under the provisions of the Federal Water Pollution Control Act . . . ." The Federal Water Pollution Control Act governs the discharge of pollutants into the ocean through outfalls no matter how far offshore the outfall terminates. 33 U.S.C. § 1362(12 & 14) (1976 & Supp. II 1978), § 1342(a)(1) (1976); *Pacific Legal Foundation v. Costle*, 586 F.2d 650, 665-56 (9th Cir. 1978), *rev'd on other grounds*, 445 U.S. 198 (1980).

The Administrator states that section 1412a absolutely prohibits the ocean dumping of sludge after December 31, 1981. (Br. for EPA at 50) Therefore, he says, "it would be anomalous if Congress, in a limited variance provision enacted a month after it set a deadline for ending sludge dumping in ocean waters, authorized EPA to issue such variances to dischargers of sewage or sewage sludge from outfalls into waters closer to shore". (Br. for EPA at 51)

The apparent anomaly disappears upon a thorough study of section 1412a. The section does not create an absolute ban on ocean dumping of sludge, for the absolute terms of section 1412a(a) are qualified by the definition of sludge in subsection (b). Only dumping sludge which "may unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological systems, or economic potentialities" is prohibited. *See New York v. EPA*, No. 80 Civ. 1677, slip op. at 3 (S.D.N.Y. April 14, 1981).

This interpretation of section 1412a is fully supported by the legislative history of H.R. 4297, the bill which became Pub. L. No. 95-153, 91 Stat. 1255 (1977) codified as section 1412a. The House Committee on Merchant Marine and Fisheries added the language of section 1412a to the bill after rejecting a version that would have absolutely prohibited the dumping of sludge, harmful or not, after December 31, 1981. *See* H.R. Rep. No. 95-325 (Part I) 95th Cong., 1st Sess. 1-4 (1977). The House and Senate passed the bill without amending the relevant portion. 123 Cong. Rec. 33789-90 (1977), 123 Cong. Rec. 34588 (1977). During debate the bill was described to the House and Senate in terms that do not support an absolute interpretation of section 1412a. 123 Cong. Rec. 33170 (1977) (Remarks of Rep. Breaux); *Id.* at 33171 (Remarks of Rep. Ruppe); *Id.* at 33787-88 (Remarks of Rep. Hughes); *Id.* at 34585-86 (Remarks of Sen. Moynihan, Sen. Muskie and Sen. Mathias). As the House Committee Report states, "the substitute altered language so as not to prohibit the dumping of all sewage sludge after 1981, but only sewage sludge which may unreasonably degrade the marine environment". H.R. Rep. No. 95-325 (Part I) 95th Cong., 1st Sess. 2 (1977). Thus the interpretation of section 1412a urged on this court by the Administrator was specifically rejected by the Congress.[10]

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[10] We express no opinion on the level of proof that an applicant for a permit to dump sludge under the Marine Pro-

If the contemporaneous enactment of section 1412a of the Marine Protection Act has any influence on the proper interpretation of section 1311(h) the influence is contrary to that suggested by the Administrator. Under section 1412a the Administrator must determine which sludge dumping operations will unreasonably degrade the marine environment. The regulations that deal with ocean dumping contain no absolute prohibition on applications for permits to dump sludge. *See* 40 C.F.R. Part 220 (1980). Thus, even under the statute which the Administrator argues is "absolute" the regulations permit applications for sludge dumping.

The Administrator's attempt to avoid the plain meaning of section 1311(h) relies to a great extent on legislative history. Where the statutory language is plain and direct any contrary meaning must be shown by legislative history that is more plain and direct. *See Aaron v. SEC*, 446 U.S. 680, 697 (1980); *Markham v. Colonial Mortgage Service Co.*, 196 U.S. App. D.C. 50, 53-54, 605 F.2d 566, 569-70 (1979). The legislative history that the Administrator relies on simply does not rise to the level necessary to contradict the statute.[11]

For the above reasons it appears that the plain language of the statute must prevail. Section 1311(h)

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[10] [Continued]
tection Act must meet. We note that the absolute interpretation of section 1412a advanced in the brief for EPA may not be the final position of the Agency. *Cf.* 44 FED. REG. 34797 (1979).

[11] In addition to the above-mentioned portions of legislative history the Administrator relies on a letter inserted in the record of the Senate debate on the 1977 Amendments as proof that his interpretation of section 1311(h) is correct. (Br. for EPA at 54) The letter in question was written by Thomas Jorling, Ass't Administrator for Water and Hazardous Materials, and addressed to Sen. Muskie. 3 LEG. HIST. 449-50. The letter cannot fairly be read in the manner the Administrator suggests and is of no help on this issue.

authorizes applications for permits to discharge "any pollutant", which includes sewage and sludge. The regulation to the contrary, 40 C.F.R. § 125.59(b)(4) & (5), is not in conformity with the statute.

Plants That Have Achieved Secondary Treatment

The final regulations also prohibit the issuance of a section 1311(h) permit "[w]here the applicant is currently meeting effluent limitations based on secondary treatment." 40 C.F.R. § 125.59(b)(9)(1980). The Administrator explained the need for this prohibition during the rulemaking proceeding as follows:

> In response to the question whether dischargers which are currently achieving effluent limitations based on secondary treatment may apply for a section 301(h) [1311(h)] permit, this provision makes clear that such dischargers are ineligible for modified permits. Extensive discussion in the legislative history emphasizes that section 301(h) is a narrowly drafted provision which allows certain dischargers who meet the statutory criteria to obtain permits which modify the requirements of secondary treatment. There is no indication that Congress intended to enable dischargers who have attained effluent limitations based on secondary treatment to relax their efforts, in clear contradiction of the goals and policies stated in section 101 [1251] of the Act.

44 FED. REG. 34798 (1979).

The purpose of section 1311(h) is to permit some coastal municipal sewage treatment plants to avoid costs associated with secondary treatment so long as environmental standards can be maintained. If a treatment plant can discharge a pollutant and meet the criteria of section 1311(h) unnecessary expenditures may be avoided.

The Administrator avers in the above quoted passage that the goals of section 101 of the Act, 33 U.S.C. § 1251 (1976), are contradicted by allowing plants that have achieved secondary treatment to apply for permits under section 1311(h); but to the extent that this is true the decision has been made by Congress. The Administrator cannot restrict the scope of the statute by reasoning that undercuts the purpose of the statute.

The Administrator argues that the legislative history "does not suggest that in enacting [section 1311(h)] Congress meant to sanction a retreat or 'backsliding' where statutory goals had already been achieved." (Br. for EPA at 62) On the contrary, there is some indication that the Agency and the Congress knew that the terms of section 1311(h) would allow plants performing at the secondary treatment level to apply. The Assistant Administrator for Water and Hazardous Materials sent a letter to Senator Muskie which listed cities in California as potentially eligible under section 1311(h). That list includes at least one water district that had achieved secondary treatment—Marina County Water District, California. 3 LEG. HIST. 449-50. (Br. for PLF at 23, Br. for EPA at 61, n.46) If secondary treatment achievement was a factor the Agency should have excluded the Marina County Water District. Further, Congress knew that many municipalities had achieved secondary treatment, see p.2, *supra*, yet Congress showed no inclination to exclude them from the benefits of section 1311(h).

Senator Gravel submitted a statement during the Senate debate on the conference bill which included the following comments:

> When I introduced the measure I did not intend to limit the application of the provision to Anchorage, Seward, and a few other cities. I intended to allow any city that can meet the geographical

> requirements to come forward and attempt to prove their case. (*That might even include communities currently under schedule to provide traditional secondary treatment.*) That is my understanding of the conference's intention as well.

3 LEG. HIST. at 535 [emphasis added].

We think the Administrator's decision is arbitrary and capricious in that it unreasonably prohibits applications from those cities that have achieved secondary treatment. Treatment plants that are under schedule to achieve secondary treatment are eligible to apply for a permit. *See* Senator Gravel's comment, *supra.* A treatment plant that has expended the funds to achieve secondary treatment but has failed to achieve consistent treatment levels is eligible to apply for a permit. (Br. for EPA at 61, n.46) Thus, the amount of money expended to achieve secondary treatment is irrelevant under the Administrator's scheme. A treatment plant that did not even attempt to achieve secondary treatment is eligible to apply because it has not achieved secondary treatment. However, a treatment plant that attempted to comply with the statutory mandate, 33 U.S.C. § 1311 (b) (1) (B) (1976), and did so successfully, is not eligible. The Agency is rewarding failure and punishing achievement.

The regulatory scheme penalizes treatment plants that complied with the statutory deadline. A plant that met the deadline cannot apply for a permit, and reduce costs if the permit is granted, for no other reason than that it met the deadline. Nothing in the statute indicates that Congress intended such arbitrary and potentially wasteful distinctions to be made. The regulation prohibiting the issuance of permits for plants that have achieved secondary treatment cannot stand.

APPLICATION CONTENTS, TOXIC CONTROLS, & BIOLOGICAL MONITORING

The challenged regulations are criticized as being overly detailed and inflexible in setting out the requirements for a proper application under section 1311(h). We deal here with the significant objections to the application content regulations.

Anchorage contends that certain of the regulations concerning the content of applications for section 1311(h) permits impose unreasonable and impractical requirements. Specifically, Anchorage complains that section 125.64(d) imposes impractical requirements for the control of toxic pollutants from non-industrial sources (Br. for Anchorage at 23-27) and that section 125.62(b) imposes impractical requirements for monitoring the impact of a discharge on aquatic life. (Br. for Anchorage at 18-21) Anchorage points out that because of the unique characteristics of Cook Inlet there may be great difficulty in performing year-round tests, sampling aquatic life under ice, etc. We are urged to find that the requirement of data on the impact of a discharge on public water supplies, aquatic life, and recreational uses of the water body, section 125.61(b)(c)&(d), and the chemical assessment of the discharge, section 125.61(a) are unnecessary. (Br. for Anchorage at 14-18)

To a large extent Anchorage's complaints originate in the allegedly unique nature of the Anchorage environment. However, because the Agency must regulate more locations than Anchorage, the regulations need not be tailored to fit its individual characteristics.

The regulations are, however, worded in a manner that suggests a lack of flexibility. *See, e.g.*, section 125.59(b)(8); section 125.62(b)(1)(iii). We have been assured by the Agency that the application requirements will be enforced with flexibility and discretion. (Br. for

EPA at 80, n.60, 81, n.62) The attorneys for the Agency made similar representations to the court at oral argument. We expect this to be the case.

The argument that the toxic control program envisaged by section 125.64(d) is impractical cannot be completely dealt with by promises of flexibility. Anchorage contends that the toxic control program of section 125.64(d) exceeds that required of plants treating sewage at the secondary stage. (Br. for Anchorage at 21-22) The Administrator informs the court that the practicability requirement of the statute [12] is preserved in the regulations by placing the burden on the applicant to show what economic, legal, or institutional limitations render greater toxic control efforts impracticable. (Br. for EPA at 71-72, *citing* 44 FED. REG. 34812 (1979))

Section 125.64(d) is a reasonable interpretation of the statutory requirement. The applicant bears the burden of showing why more toxic control is not practicable. We note, however, that the issue of the practicability of a program required of a particular permittee is not before this court. We therefore cannot rule on the question of whether an applicant "must consider as an offset to the costs of source control any savings in capital or operating and maintenance expenses which may accrue as a result of being issued a [section 1311(h)] modified permit." 44 FED. REG. 34812 (1979). Whether this requirement is "practicable" in the statutory sense will depend on the particular circumstances of each municipal applicant.[13]

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[12] Section 1311(h)(6) requires the applicant to show that "to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works." 33 U.S.C. § 1311(h)(6) (Supp. II 1978).

[13] The petitioners' other arguments have been considered by the court and found not deserving of a written explanation of the rejection of each contention.

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CONCLUSION

For all of the foregoing reasons the regulations implementing the section 1311(h) variance for publicly owned treatment works are upheld and the petitions denied, with the exception that the restrictions on the eligibility of plants which have achieved secondary treatment and plants discharging sewage and sludge, 40 C.F.R. § 125.59 (b)(4&5), (b)(9) (1980), are remanded to the Administrator for further proceedings consistent herewith. The stay of the final application deadline entered by this court on September 12, 1979 is lifted.

So Ordered.

EXHIBIT 10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C.

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PUBLIC MEETING

on

MODIFICATION OF SECONDARY TREATMENT REQUIREMENT

(Pages 89-97, and 151-153, only.)

FEBRUARY 22, 1978
9:40 a.m.

CONFERENCE ROOMS A-H
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Reported by:

THOMAS R. WILSON, CSR, CM
(CSR No. 2052)

COPY

Humboldt Bay Wastewater Authority; David Phillips, representing the District, the Sewage District, from Salem Massachusetts; and then Lori Adams, representing the Environmental Defense Fund.

That presumably will get us to the lunch hour. And before the lunch hour, I will give another program of appearance.

Jim Perry?

MR. JAMES F. PERRY: Good morning. My name is Jim Perry, and I represent the Food Processing Industry in Watsonville. Actually I represent some 20 food processors; but in the interest of mercy, I promise not to take five minutes for each one.

Four and a half years ago, some 20 food processors in Watsonville met to discuss water and energy requirements for future years. The Watsonville Food Processors Water and Energy Conservation Association was formed to study the problem, and at that time, our intent was to fully reclaim our washwater by using it to grow crops.

And the processors, in the last four, four or so years, have spent some $75,000 of their own capital with private consultants, plus some state Title II funds, for a study in conjunction with the City of Watsonville. Unfortunately, this reclamation project

did not prove to be economically feasible. But, despite this setback, one processor is now engaged in a pilot program on 45 acres to explore the possibility of utilizing plant washwater.

For the record, as a group, we still feel that our processing plant washwater is of sufficient high quality for use in crop irrigation without pre-treatment other than on-site quality control.

Our dilemma is only partially economic. We are concerned, of course, with the high cost of water and the high cost of effluent disposal, and right now, the run-away cost of electrical energy. Every plant in Watsonville has seen the cost of fuel and power accelerate more than a hundred per cent in the past two years. Our main worry, though, is the downstream supply of sufficient water and sufficient energy.

The food processing industry in Watsonville is still committed to saving its washwater -- to the growing of crops with washwater.

In the meantime, we readily acknowledge our environmental responsibilities to the entire California community. There is no question that heavy metals, toxic materials, etc., are injurious to marine life. This, however, is not the character of our processing washwater. We feel that we can utilize deep water

ocean outfall with higher BOD levels than present EPA standards without any damage to marine life systems.

Oxygen demand is not a problem in Monterey Bay with out relatively small outfall, which is in an area of extremely high turbulence and wave action. And our data suggests further that the ocean can remove BOD more efficiently than electrical energy at the secondary treatment level.

We would respectfully request that EPA review its present criteria of 30 milligrams per liter of BOD for ocean discharge. The cost of electrical energy to provide secondary treatment which meets EPA standards of 30 milligrams per liter for ocean discharge is our main problem. Many processors use large quantities of water for washing and blanching fruits and vegetables, and we are concerned that we will be unable to pass these heavy costs on to the consumer.

We are in a very low-margin industry, particularly with reference to certain vegetable items. Some products and some companies may be priced out of the marketplace.

Now, our effluent disposal disposal situation is unique in that we have a significant quantity of industrial wastes, but they are not industrial wastes in the sense that we have talked about here just

recently a minute ago. The overall effluent quality of our sewage treatment plant water is like domestic waste since our industrial wastewater is almost entirely from food processing industries. Our community is easily the biggest single frozen vegetable producer on the West Coast, if not the world, plus a significant factor in the freezing and canning of fruit.

It is important here to make a point that Watsonville is in a very unique situation on the Central Coast. The total economic balance of the Pajaro River basin is centered around the washwater of some 15 of the 20 processors I represent. Each and every processor is presently engaged in developing an on-site monitoring and control system to determine point source problems and to cure them before the effluent leaves the processing plant premises.

And I would like to conclude with a little simile if you want to call it.

Everyone eats soup. It's a staple item on every menu in every culture. And our washwater is essentially of the same character. A processor's blancher is basically a very short-term soup pot since frozen food processors partially cook the product before they freeze it.

Our effluent is not mine tailings, industrial

or chemical residues, asbestos fibers or carcinogenic wastes. It is a mixture of low-strength fruit and vegetable washes and rinses. There is no substantive pollution in our cook water other than nutrients.

Our past studies have proven that we do not vent chlorinated hydrocarbons or other toxic materials to the present sewer plant. The quality of our wash-water can be further improved with presently available on-site equipment. If Watsonville could qualify for an ocean discharge waiver, oceanographic studies in the area of the present outfall support the fact that BOD standards are not the answer. Our data suggests that parameters other than BOD are of much greater importance when assessing deep-water ocean discharge.

And as we understand the purpose of this meeting, we have been asked to share our views on how EPA should interpret and apply the statutory criteria which the applicant must meet in order to obtain a modification waiver. And we feel that any waiver, doesn't matter who gets it, should stand on its own merits as to location, the nature of the effluent and the specific marine geography and currents at the point of the discharge.

We feel that the important yardstick is the quality of the water. The requirements and/or parameter

should be set up to provide this specific result.

Thank you.

CHAIRMAN JORLING: Thank you.

Let me ask a couple of questions briefly.

Do you and your members monitor for the full range of pesticide residues before these materials are discharged to the waste treatment plant?

MR. PERRY: Well, since the relatively recent restrictions over the past few years on what we can do with pesticides and herbicides in the field, the vegetables are, in effect, monitored before they ever get to the plant. We can't run them. We have had to change our pesticide and herbicide control programs radically in order to comply.

CHAIRMAN JORLING: But with respect to the specific monitoring, you do not perform monitoring of pesticide residues before they are discharged into the plant?

MR. PERRY: Now, what do you mean? Do we monitor the vegetable when we bring it in, what the count is?

CHAIRMAN JORLING: The washwater, before it enters the treatment system, the publicly owned treatment system?

MR. PERRY: Well, we have data which we can

give you. We don't monitor for it on a continual basis, but the city is preparing a monitoring and point source ordinance at the present time.

CHAIRMAN JORLING: Now, this obviously is a question directed at you and your members, does not create the negative side of the answer or would lead to the negative answer, but one of the reasons uniform technological standards were adopted for both industries and municipalities was the uniformity and the desire to avoid economic advantage as a result of different pollution control requirements. Would your industry or members of your industry be concerned if there was relaxation of pollution control requirements in other areas with consequent major and signiciant reductions in user charges when competitors in adjacent areas would not take advantage of such reductions. Does that concern you?

MR. PERRY: Perhaps it was a rather lengthy question. Are you suggesting that we would not take advantage of an economic situation as food processors if we were given the opportunity to?

CHAIRMAN JORLING: In the particular situation in Watsonville, you obviously will. As a representative of industry, does that cause you concern?

MR. PERRY: Oh, yes, it causes us great

concern. There have been small food operations close all over the country because of inability to comply.

It's odd in one respect that Watsonville produces a massive amount of the California frozen food and vegetable market. And the economic impact would be felt in one specific area severely. If you close down the 20 food processors in Watsonville --

CHAIRMAN JORLING: I'm not suggesting that. I'm suggesting that food processors in the Central Valley will not be able to take advantage of these reductions in user charges and your members will; that there is a potential for distortion there that's bad public policy. That's the question.

MR. PERRY: Well, some of the food processors in the Central Valley have access to more sophisticated sewage systems which were built when things were cheaper already. Modesto, for example.

CHAIRMAN JORLING: Any other questions?

MR. De FALCO: Let me take that one step further, and let's talk about the adjoining area in San Jose where they, in all probability, will not be eligible for this kind of a relief. Is there a potential for an adverse economic effect in those two areas, or a possibility even of the movement of some food processors to the Watsonville area?

MR. PERRY: Well, the adverse economic effect in San Jose has already been felt because there are several people making arrangements to terminate food processing in San Jose for that reason.

Of course, the San Jose economy is a tremendously diverse thing. Food processing is no longer a major portion of their economy at all.

CHAIRMAN JORLING: Don?

MR. DUBOIS: No.

CHAIRMAN JORLING: Lisa?

MS. FRIEDMAN: I have one question, also about economics.

Has your group done any study on the relative costs of pretreatment in order to meet these criteria versus secondary treatment?

MR. PERRY: Yes, we have. In fact, I will send you a copy. It's a rather extensive report.

MS. FRIEDMAN: We would appreciate it if you would submit that for the record.

MR. PERRY: We had attempted to totally reclaim all our washwater and put it on the lands. We found at the present time it wasn't economically feasible because of the tremendous costs involved. But I still think that that's -- our long-term ambition is to not put any water -- not waste any water. But

Mr. Jorling, members of the panel:

My name is Fred Harper, President of the AMSA, the Association of Metropolitan Sewerage Agencies.

We welcome the opportunity to comment generally on the problems involved in developing, regulations to implement Section 301(h) of the 1977 amendments to the Water Pollution Control Act.

A number of AMSA members are represented here at this public meeting and are providing the details on some of the options EPA is considering in drafting regs which will be effective in these agencies. Our points, therefore, are general and procedural in character, and hopefully brief.

First is the general tone and goal.

Congress has tossed EPA a tough assignment since now some judgment must be exercised, rather than the easier former system of simply requiring secondary treatment across the board. We note that recently EPA has accepted oxidation ponds in some situations as providing secondary treatment. In any event, the goals should be to establish regulations which are clear, which are reasonable and which will help in achieving Congress' aim which, as we see it, is to enable some coastal agencies to avoid waste of public funds, federal, state and local, where there is no

appreciable beneficial environmental effects from such expenditures.

One point of considerable importance is timing. We urge that no regulations be promulgated which have the result of freezing the situation into a period of time in the past.

For example, it would be foolish, in our view, to require that a monitoring system must have been in existence and meeting prescribed standards as of December 27th, 1977, the date of enactment of the amendments.

In addition, many coastal agencies are committed to improvements for which construction is underway, utilizing federal funds. Waiver considerations should take this into account in determining the effects of the discharge on a marine environment.

On the question of burden of proof, we believe it is clear that the applying discharger bears the burden fully. We hope and trust, however, that EPA's staff does not deem its role to be an adversary but, rather, it should be demanding in the material that must be submitted and should have a healthy skepticism about the quality of the data and their analysis.

But EPA should also want Section 301(h) to

carry out the Congressional intent underlying it. Accordingly, we presume that the Administrator may approve an application with a proviso, or a series of provisos, that the approval is subject to. It would be foolish to deem the process to be a game in which the applicant would be deemed to have lost because its initial application was incomplete.

In short, we argue for a process that will enable the Administrator to have the data and arguments before him, with the flexibility to grant an application, to deny it or to approve it with conditions.

Although statutory language does not require public hearings, we believe it highly desirable to set up the process for the Administrator's review in a fashion that will provide an opportunity for the broadest possible input.

The NPDES permit program seems ideally suited for this purpose, and we suggest it for your consideration.

We are pleased to answer any questions or provide any information you might wish.

CHAIRMAN JORLING: Thank you, Fred.

Paul?

MR. De FALCO: You know, Fred, we got into a series of questions earlier in the food processing

plants down in the Watsonville area, and I want to ask you in terms of AMSA representing a number of inland as well as coastal communities, do you see any problem with an unusual advantage being established here for a coastal community in terms of cost of treatment vis-a-vis industrial facilities and the possible flight of industrial facilities from inland communities to the coastal areas?

MR. HARPER: Well, first I'll say that one of the provisions, of course, of the statutory criteria is that we have to comply with all pretreatment requirements. So industry is not going to get off on that basis.

MR. De FALCO: Well, I'm thinking basically of the food processing industries.

MR. HARPER: Okay. The food processors, I think the -- I am going to avoid the point possibly in that I think the costs of waste treatment is one of many things that come into a consideration of where you locate a plant. You have labor; you have utilities, land, and this is just another feature of it.

But it may be less money for them, yes.

CHAIRMAN JORLING: Don?

MR. DUBOIS: No.

CHAIRMAN JORLING: Thank you, Fred.

MR. HARPER: Thank you.

CHAIRMAN JORLING: The next witness is Rim Fay, who is representing himself.

MR. RIMMON C. FAY: Mr. Jorling and members of the committee:

Thank you very much for having this hearing and an opportunity to appear here today.

I am Rimmon C. Fay, Venice, California.

I'm a member of a number of organizations, including the American Fishery Society and the National Coalition for Marine Conservation. All the organizations with which I am affiliated have taken very strong positions with regard to the matter of water quality and the protection of the productivity of the marine environment.

While I'm speaking today as an independent marine biologist and not for any of these organizations I should like to assure you that my comments are consistent with the goals and objectives of these organizations.

Specifically, I wish to address two of the eight points to be reviewed today as announced in the Federal Register on February 3rd. These two points, two and three, deal with the maintenance of a balanced

EXHIBIT 11

SECTION 301(h)*

(h) The Administrator, with the concurrence of the State, may issue a permit under section 402 which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant in an existing discharge from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that-

(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;

(2) such modified requirements will not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(7) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(8) any funds available to the owner of such treatment works under title II of this Act will be used to achieve the degree of effluent reduction required by section 201 (b) and ~~(g)~~(2)(A) or to carry out the requirements of this subsection.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance which paragraph (2) of this subsection, and section 101(a)(2) of this Act.

*Prior to the 1981 amendments to the law.

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